ORDER NO. VRD9904008C2

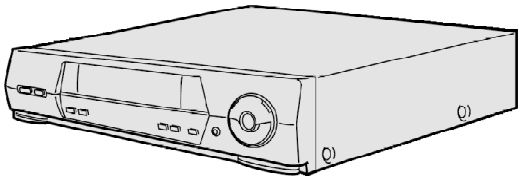
Video Cassette Recorder

Panasonic VHS PAL

Hi-Fi HQ

NV-HD642EE/EE-K / NV-HD647EE

Z-MECHANISM



SPECIFICATIONS

SPECIFICATIONS

ITEM	SPECIFICATION
POWER	SOURCE: 220-240 V AC 50/60 Hz CONSUMPTION: 21 watts
RECORDING SYSTEM	2 rotary heads, helical scanning system
TV TUNER SYSTEM	PAL
RF OUT SYSTEM	VHF: CH02-CH12 (PAL/SECAM B) CHR1-CHR12 (SECAM D) UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) CATV: CH001-CH041 (PAL/SECAM B) 44 MHz 470 MHz (SECAM L) 75 Ω terminated UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) 71 ± 3 dBμ, 75 Ω terminated
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (I -R heads) 1 pair for trick play (1-P heads) INPUT: EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω unbalanced VIDEO IN (AV2: FRONT) Connector 1.0 Vp-p, 75 Ω unbalanced (NV-HD627E) OUTPUT: EURO AV (AV1, AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω unbalanced

ITEM	SPECIFICATION
AUDIO	HEAD: 1 stationary head (Normal mono only) 2 channels (Hi-Fi Sound-Stereo) INPUT: EURO AV (AV1, AV2) Connector (21 pin) More than -6dBV (500 mV), 10 kΩ AUDIO IN (AV2: FRONT) Connector More than -6dBV (500 mV), 10 kΩ (NV-HD627E) OUTPUT: AUDIO OUT Connector (Phono type) -6 dBV (500mV), Less than 1kΩ EURO AV (AV1, AV2) Connector (21 pin) -6 dBV (500mV), Less than 1kΩ
TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: ou sec. with 180 min. type tape
OPERATING TEMPERATURE	5 C - 40 C
OPERATING HUMIDITY	35% 80%
DIMENSIONS	430 (W)-87(H)-300(D) mm
WEIGHT	4.0 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infrared Remote Controller

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

1. INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service this model.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note:

1. **Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual. / Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)**
2. **The Model No. is indicated on the Schematic Diagram and Circuit Board Diagrams as follows.**

Model No.	Indication Mark
NV-HD642EE/EE-K	(HD642)
NV-HD647EE	(HD647)

2. GENERAL DESCRIPTIONS

2.1. SERVICE INFORMATION

2.1.1. CHANNEL MEMORY IC INITIALIZATION

When replacing the Memory IC7801 and/or Oscillator X6001, Memory IC7801 has to be initialized due to the setting value changes.

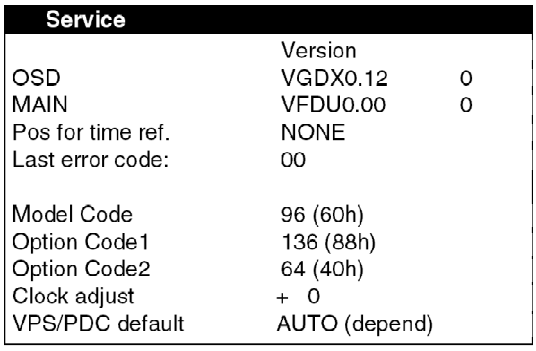
Note:

1. **When replacing the memory IC7801, the OSD microprocessor IC7703 should be replaced together.**
2. **It has to be performed before tuning.**
3. **Meaning of "MEMORY IC INITIALIZATION" is to make dependency in different models and to distinguish between different features.**
4. **It does not need to perform when replacing the System Control IC6001.**

<CHANNEL MEMORY IC INITIALIZATION>

PROCEDURES	FIP Display	Monitor Screen
Press the FF and EJECT keys simultaneously for 3 seconds.		**None**
Press the FF and EJECT keys simultaneously more twice.		**None**
Press the EJECT key for 3 seconds.		**None**
Press the CH UP key twice.		**None**
Press the POWER key.	**(Colon starts flashing)**	**Service Screen (See Fig.S1 Service Secreen (sample))**
Set the Model Code and Option Code by pressing 10-key or [RIGHT] [LEFT] [UP] [DOWN] keys on the Remote Controller Unit. (See Fig. S2 Model Code & Option Code)		**Service Screen (See Fig.S1 Service Secreen (sample))**
To release Service Mode, press the POWER key and then press the FF and EJECT keys simultaneously 6 times until the normal indication on the FIP.		**None**

Fig.S1 Service Secreen (sample)



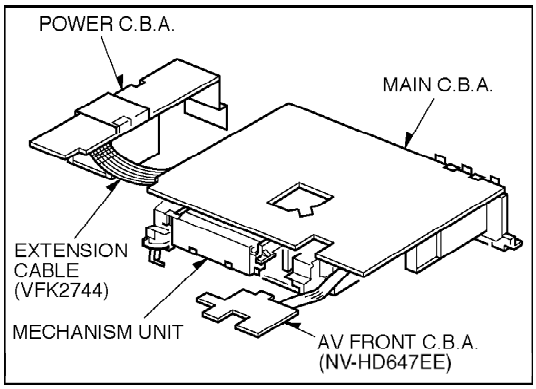
Model No.	Model Code	Option Code 1	Option Code 2
NV-HD642EE	120	136	64
NV-HD647EE	121	8	64

Fig. S2 Model Code & Option Code

2.1.2. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.
And then connect the Extension Cable (VFK2744) between the POWER C.B.A. connector (P1103) and the MAIN C.B.A. connector (P1001) as shown in Fig. S3.

Fig. S3

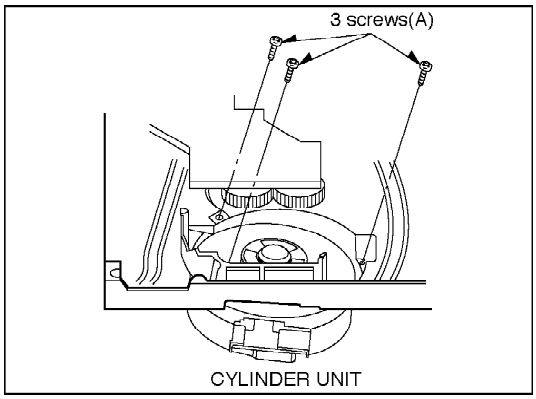


2.1.3. CYLINDER UNIT REPLACEMENT

1. CYLINDER UINT REPLACEMENT

A. Remove the 3 Screws (A) of the CLINDER UNIT with a magnetized screw driver.

Fig. S4

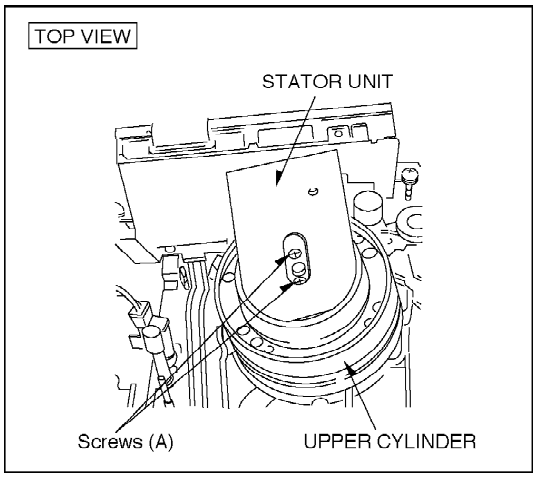


2. UPPER CYLINDER DISASSEMBLY

A. Remove 2 screws (A).

B. Remove the Cylinder Stator Unit.

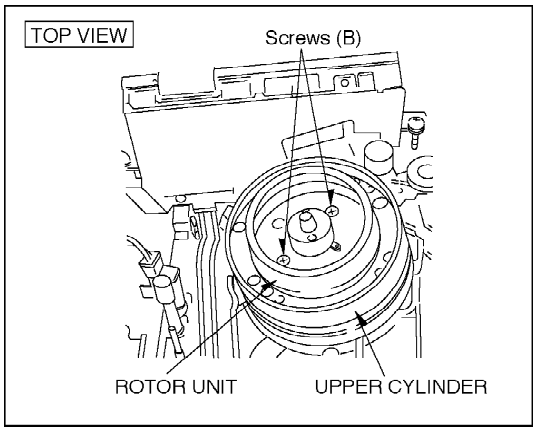
Fig. S5



C. Remove 2 screws (B).

D. Remove the Cylinder Rotor Unit.

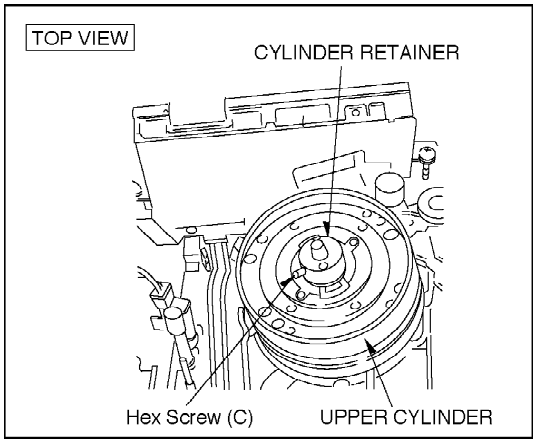
Fig. S6



E. Loose hex screw (C) (1.5mm) and remove the Cylinder Retainer.

F. Remove the Upper Cylinder.

Fig. S7



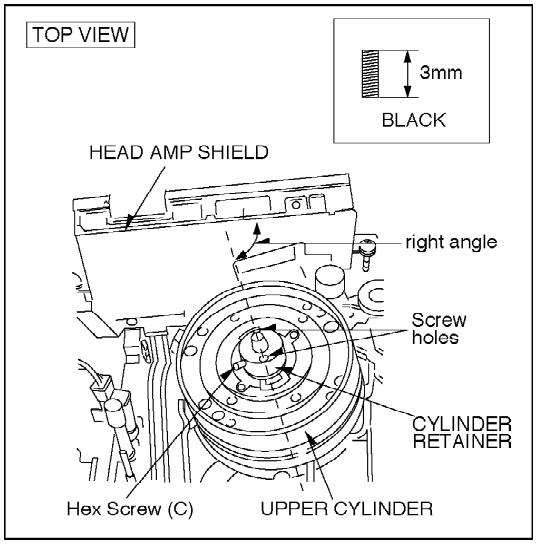
3. UPPER CYLINDER ASSEMBLY

A. Install the Cylinder Retainer so that the 2 holes on top of the

Cylinder Retainer are at right angles with the Head Amp Shield.

B. Tighten the hex screw (C) (1.5mm) while pressing down on top of the Cylinder Retainer.

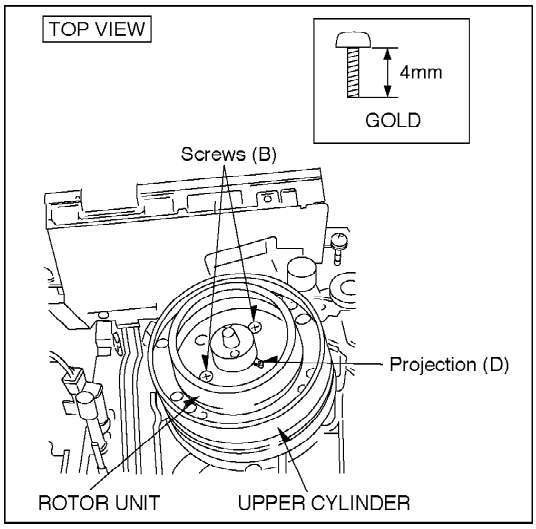
Fig. S8



C. Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.

D. Tighten 2 screws (B).

Fig. S9



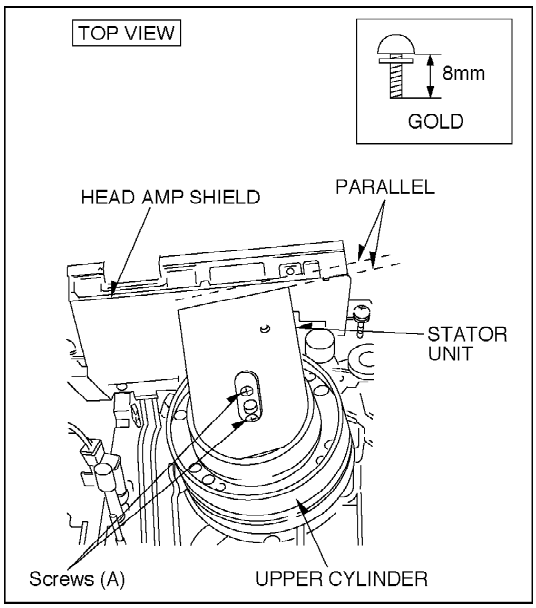
E. Install the Cylinder Stator Unit so that the rear side of the Cylinder Stator C.B.A. is parallel with the Head Amp Shield.

F. Tighten 2 screws (A).

G. Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F/NTSC: VFM8080HQFP) and adjust it if

necessary.

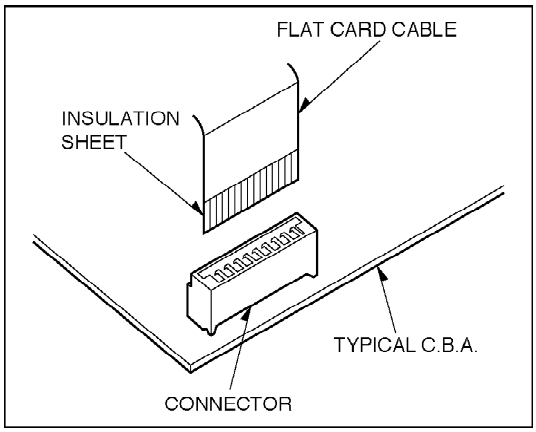
Fig. S10



2.1.4. FLAT CARD CABLE INSTALLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

Fig. S11



2.2. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

1. Service Information Display Operation

A. Press the FF and EJECT keys simultaneosly for 3 seconds and set the Service Mode 7.

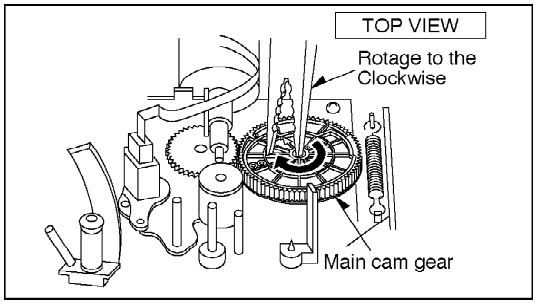
B. Press STOP key in order to rotate the Loading Motor for unloading operation. (Pay an attention of tape slack)

2. Manual Operation

A. Disconnect the AC Mains Lead and remove the Top Panel.

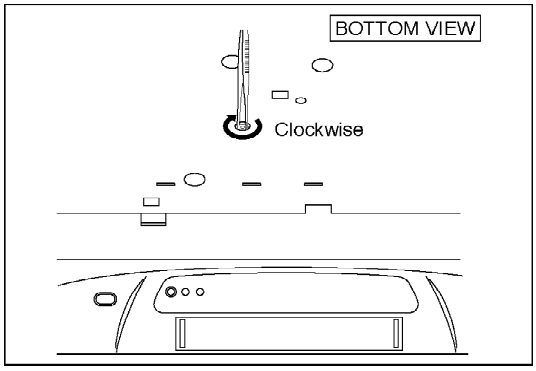
B. Rotate the Main Cam Gear clockwise until the Loading Posts move to fully unloaded position as shown in Fig. S12. (Tape is remaining)

Fig. S12



C. Rotate the Capstan Motor clockwise from the bottom side to take up the tape.

Fig. S13



D. Rotate the Main Cam Gear clockwise until the cassette tape is ejected.

2.3. INTRODUCTION OF VIDEO CLEANING TAPE (Polishing type)

< Strong weapon for Video Head cleaning >

1. Purpose / To improve the efficiency of the Video Head cleaning service and shortening cleaning time for repair technicians. It is exclusive cleaning tape removing the hard and sticky clogging on Video Heads, without removing the casing part.

2. Feature

Shortening 30% of Video Head cleaning process.
Remove the clog by short time : 10 seconds / one cleaning procedure.

3. Specifications

Part No.	**VFK0923FT**
Tape Length	**20m/ 10 minutes**
Using Time / one cleaning	**10 seconds**
Total number of using times	**180 times**

Caution:

Please do not apply this Polishing Tape more than 10 seconds/ one cleaning procedure.

3. OPERATING INSTRUCTIONS

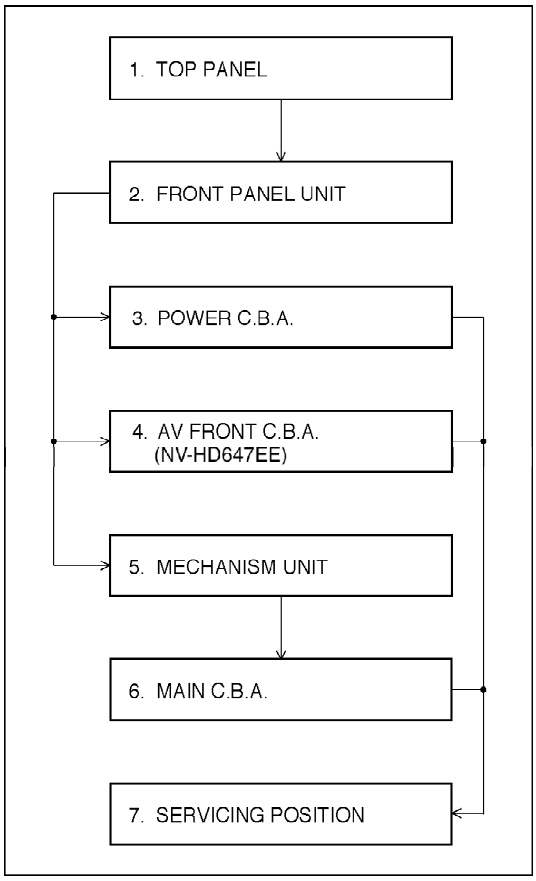
4. ADJUSTMENT PROCEDURES

4.1. DISASSEMBLY METHOD

4.1.1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

Fig. D1

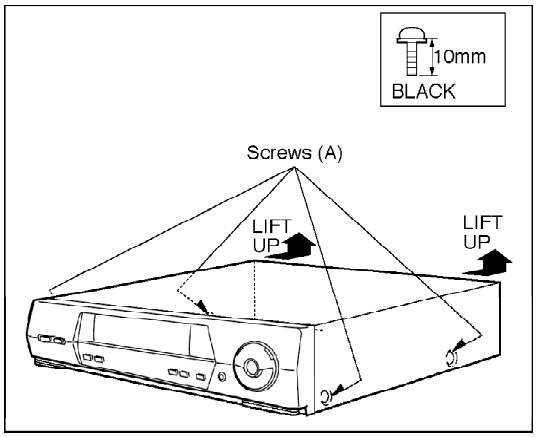


4.1.2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove	**4 Screws (A)**

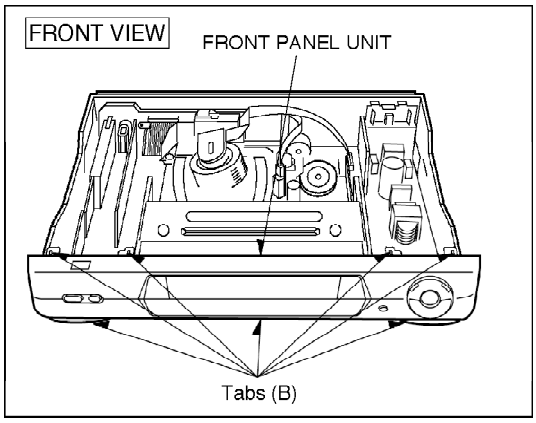
Fig. D2



2. REMOVAL OF THE FRONT PANEL UNIT

Unlock	**7 Tabs (B)**

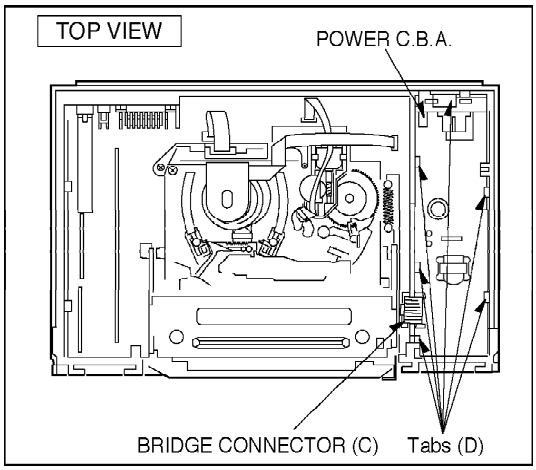
Fig. D3



3. REMOVAL OF THE POWER C.B.A.

Disconnect	**Bridge Connector (C)**
Unlock	**6 Tabs (D)**

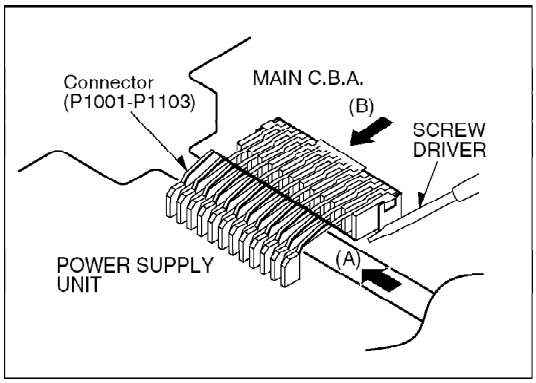
Fig. D4



COUTIONS:

Please pay an attention to disconnect the connector (P1001-P1103) which connected between Main C.B.A. and Power supply unit as shown below.

Fig. D5

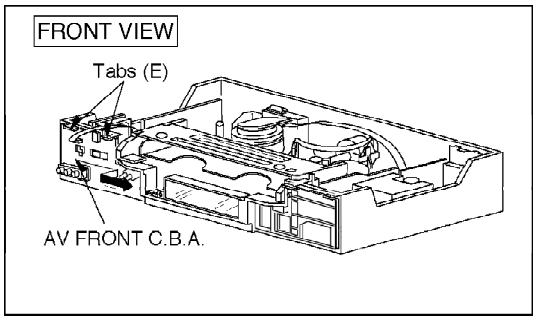


As above drawing, disconnect the connector by SCREW DRIVER from the direction (A). / Do not disconnect from direction (B) because it is possibility to damage the parts located by the connector.

4. REMOVAL OF THE AV FRONT C.B.A. (NV-HD647EE)

Unlock	**2 Tabs (E)**

Fig. D6

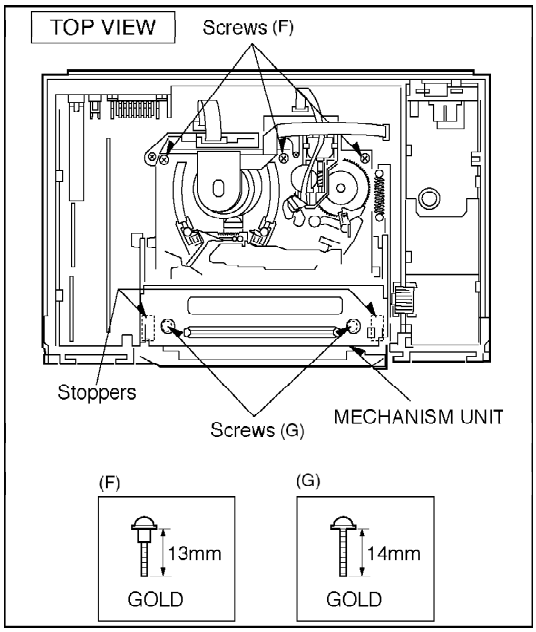


5. REMOVAL OF THE MECHANISM UNIT

Remove	**3 Screws (F)**
Remove	**2 Screws (G)**

Note:
Keep pressing 2 stoppers on Cassette Holder Plate and Press Cassette Holder Plate to the rear.

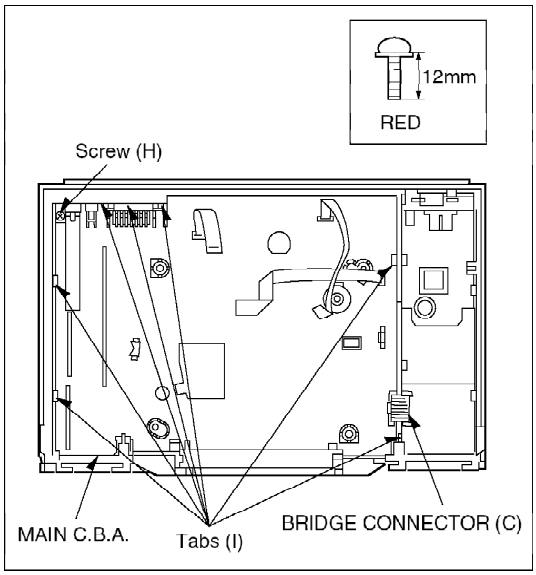
Fig. D7



6. REMOVAL OF THE MAIN C.B.A.

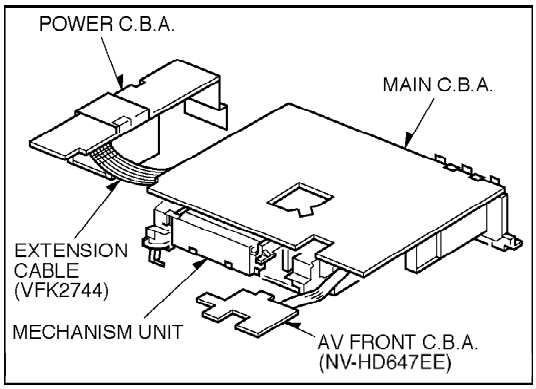
Disconnect	**Bridge Connector (C)**
Remove	**Screw (H)**
Unlock	**7 Tabs (I)**

Fig. D8



7. SERVICING POSITION

Fig. D9



4.2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the Service Manual for Z-Mechanism Chassis. / (Order No. VRD9802005C2)

4.3. ELECTRICAL ADJUSTMENT PROCEDURES

4.3.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope

- **Voltage Range: 0.005-5V/div**
- **Frequency Range: DC-35MHz**
- **Probes: 10:1 / 1:1**

2. Frequency Counter

- **Frequency Range: 0-10MHz**
- **Probes: 1:1**

3. Universal Counter

4. Digital Volt Meter (D.V.M.)

5. Video Sweep Generator

6. Sinewave Generator

7. Video Pattern Generator

8. Monitor TV

9. DC Power Supply

10. VHS Blank Tape

11. VHS Alignment Tape

- **Parts No.: VFJ8125H3F(PAL)**
- **Parts No.:VFM8080HQFP(NTSC)**

4.3.2. VCR SETTING

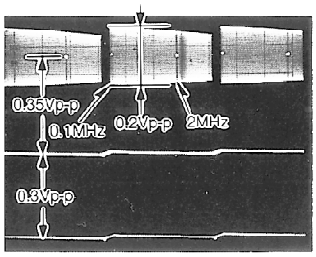
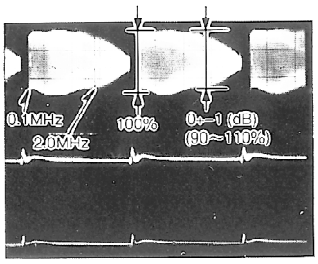
When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP

2. CHANNEL: AV1/AV2/AV3
(Set to signal input terminal number)

4.3.3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. E(
PG SHIFTER / ADJUSTMENT	---	---	PLABACK	---	ALIGNMENT TAPE / (PAL)	---
AI FUNCTION / ADJUSTMENT	---	---	PLAYBACK / (SELF-REC)	PAL / COLOUR / BAR	BLANK / TAPE	---
VIDEO / FREQUENCY / RESPONSE / ADJUSTMENT	VIDEO OUT	VR3012 (SP) / VR3013 (LP)	SP/LP / PLAYBACK / (SELF-REC)	VIDEO / SWEEP / (See Fig.E1)	BLANK TAPE	OSCILL(SCOPE/ VIDEO SWEEP GENERA

Fig.E1	Fig.E2
 CONDITION: BURST SIGNAL OFF / 75 ohm TERMINATED	

4.3.4. PG SHIFTER ADJUSTMENT / (AUTOMATIC)

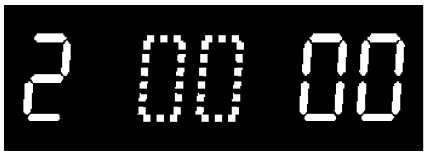
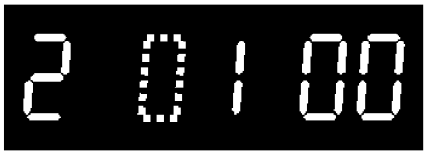
PROCEDURES	FIP Display
Press the FF and EJECT keys simultaneously for 3 seconds.	
Press the FF and EJECT keys simultaneously more twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key once.	
Insert the Alignment Tape. / / **(PAL: VFJ81215H3F)** **(NTSC: VFM8080HQFP)**	
This adjustment is automatically started. / (During the adjustment, the picture will be appeared on the monitor.)	
When this Adjustment is terminated, the following operation will be activated. **-Adjustment completed: The tape will be ejected.** **-Adjustment incompleted: "F2*" is indicated on the FIP.Check the Servo/System Control circuit and Cylinder Unit.**	
To release Service Mode, press the FF and EJECT keys simultaneously 6 times until the normal indication on the FIP.	

Fig. E3

4.3.5. AI FUNCTION ADJUSTMENT / (AUTOMATIC)

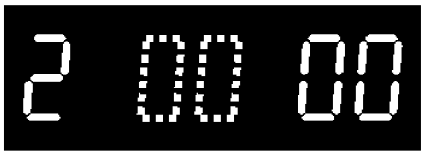
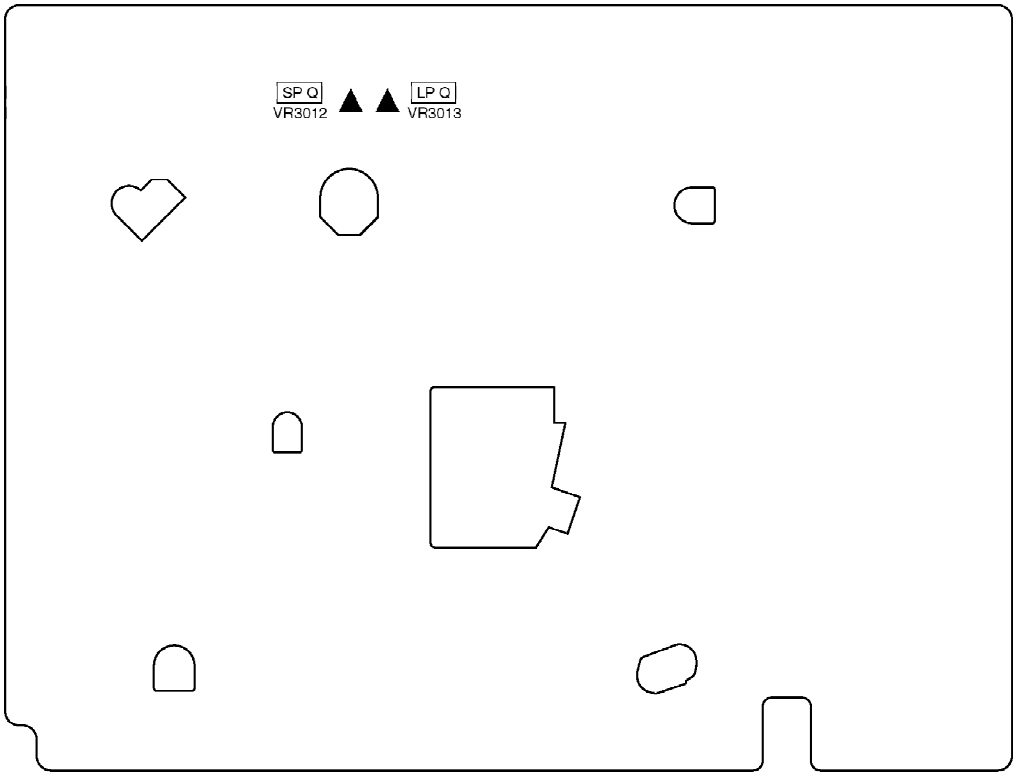
PROCEDURES	FIP Display
Press the FF and EJECT keys simultaneously for 3 seconds.	
Press the FF and EJECT keys simultaneously more twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key 3 times.	
Insert the Blank Tape. /	
This adjustment is automatically started. /	
When this Adjustment is terminated, the following operation will be activated. **-Adjustment completed: The VCR goes to STOP Mode.**	
To release Service Mode, press the FF and EJECT keys simultaneously 6 times until the normal indication on the FIP.	

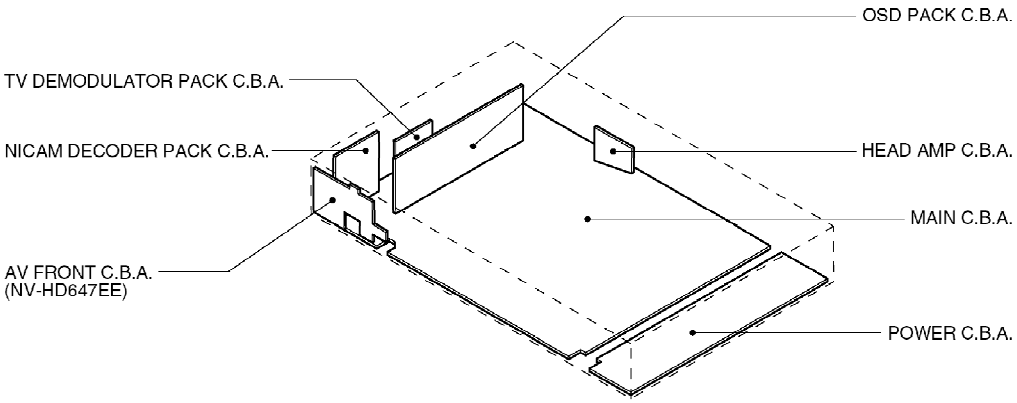
Fig. E4

4.3.6. LOCATION OF TEST POINTS & CONTROLS

MAIN C.B.A.



4.3.7. CIRCUIT BOARD LAYOUT



5. ABBREVIATIONS

6. INPUT/OUTPUT CHART

6.1. INPUT/OUTPUT CHART FOR IC6001

Fig.MP1

Fig.MP2

Fig.MP3

Fig.MP4

Fig.MP5

6.2. TRUTH TABLE

7. WAVEFORM TABLE

8. BLOCK DIAGRAMS

8.1. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

8.2. LUMINANCE & CHROMINANCE BLOCK DIAGRAM

8.3. AUDIO BLOCK DIAGRAM

9. SCHEMATIC DIAGRAMS

9.1. POWER SCHEMATIC DIAGRAM

9.2. POWER SUPPLY/RF SECTION IN MAIN SCHEMATIC DIAGRAM

9.3. TIMER SECTION IN MAIN SCHEMATIC DIAGRAM

9.4. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

9.5. LUMINANCE & CHROMINANCE/AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

9.6. INPUT/OUTPUT SECTION IN MAIN SCHEMATIC DIAGRAM

9.7. HEAD AMP SCHEMATIC DIAGRAM

9.8. OSD PACK SCHEMATIC DIAGRAM

9.9. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

9.10. NICAM DECODER PACK SCHEMATIC DIAGRAM

9.11. AV FRONT SCHEMATIC DIAGRAM (NV-HD647EE)

9.12. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM

9.13. CAPSTAN UNIT SCHEMATIC DIAGRAM

10. CIRCUIT BOARD ASSEMBLIES

10.1. POWER C.B.A.

10.2. CYLINDER STATOR UNIT

10.3. MAIN C.B.A.

10.4. OSD PACK C.B.A.

10.5. HEAD AMP C.B.A.

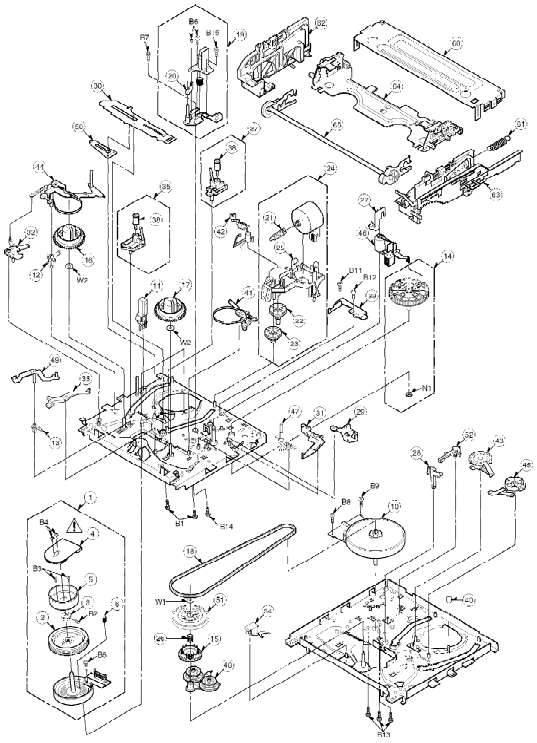
10.6. AV FRONT C.B.A. (NV-HD647EE)

10.7. TV DEMODULATOR PACK C.B.A.

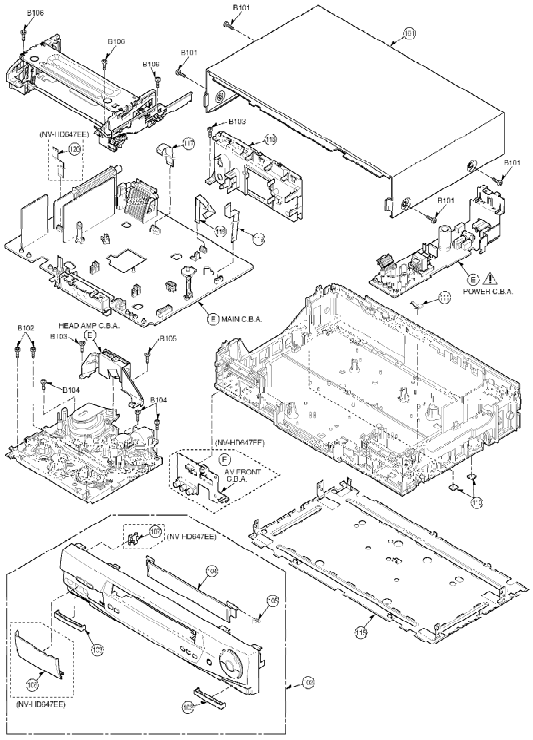
10.8. NICAM DECODER PACK C.B.A.

11. EXPLODED VIEWS

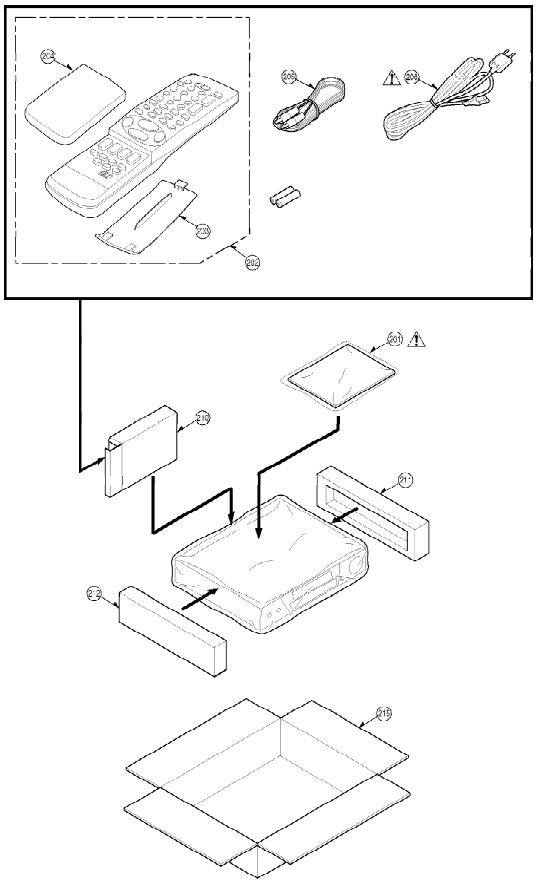
11.1. CHASSIS PARTS SECTION



11.2. CASING PARTS SECTION



11.3. PACKING PARTS SECTION



12. REPLACEMENT PARTS LIST

12.1. CHASSIS PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	1 (1)	VEG1411	CYLINDER UNIT	1	[SUPPLIED FROM MBV]
	2 (1)	VEH0844	UPPER CYLINDER UNIT	1	[SUPPLIED FROM MBV]
	3 (1)	VDB1256	CYLINDER RETAINER	1	
⚠	4 (1)	VEK7236	CYLINDER STATOR UNIT	1	
	5 (1)	VXP1823	CYLINDER ROTOR UNIT	1	
	6 (1)	VXS0135	EARTH BRUSH UNIT	1	
	10 (1)	VEK8629	CAPSTAN UNIT	1	
	11 (1)	VBS0155	FE HEAD	1	
	12 (1)	VDB1431	TENSION ARM BOSS	1	
	13 (1)	VDB1460	SUPPLY BRAKE ARM BOSS	1	
	14 (1)	VDG1220KIT	MAIN CAM GEAR	1	
	15 (1)	VDG1221	CONVERSION GEAR	1	
	16 (1)	VDR0346	SUPPLY REEL TABLE	1	
	17 (1)	VDR0347	TAKE UP REEL TABLE	1	
	18 (1)	VDV0382	CAPSTAN BELT	1	
	19 (1)	VED0412	A/C HEAD UNIT	1	
	20 (1)	VMX2656	P4 CAP	1	
	21 (1)	VDG1217	WORM GEAR	1	
	22 (1)	VDG1218	WORM WHEEL GEAR	1	
	23 (1)	VDG1219	CENTRE GEAR	1	
	24 (1)	VEM0604	LOADING MOTOR UNIT	1	
	25 (1)	VMD2619	MOTOR BRACKET	1	
	26 (1)	VMB3045	CONVERSION GEAR SPRING	1	
	27 (1)	VMD2620	OPENER PIECE	1	
	28 (1)	VMD2738	LED PRISM	1	
	29 (1)	VML3165	DRIVE RACK ARM	1	
	30 (1)	VML3166	MAIN LEVER	1	
	31 (1)	VML3167	DRIVE MAIN LEVER ARM	1	
	32 (1)	VML3172	SUPPLY SPRING ARM	1	
	33 (1)	VML3176	CONVERSION LEVER A	1	
	34 (1)	VML3177	CONVERSION LEVER B	1	
	35 (1)	VXA6040	INCLINED BASE (S) UNIT	1	
	37 (1)	VXA5854	INCLINED BASE (T) UNIT	1	
	38 (1)	VXP1840	ROLLER POST	2	
	39 (1)	VMA9672	SUPPORT ANGLE	1	
	40 (1)	VMX2639	CIRCUIT BOARD PROTECTOR	1	
	41 (1)	VXL2667	TAKE UP BRAKE ARM UNIT	1	
	42 (1)	VXL2669	CLEANER ARM UNIT	1	
	43 (1)	VXL2670	TAKE UP LOADING ARM UNIT	1	
	44 (1)	VXL2798	TENSION ARM UNIT	1	
	45 (1)	VXL2672	SUPPLY LOADING ARM UNIT	1	
	46 (1)	VXL2785	PINCH ARM UNIT	1	
	47 (1)	VXL2677	P5 ARM UNIT	1	
	48 (1)	VXL2792	IDLER ARM UNIT	1	
	49 (1)	VXL2733	SUPPLY BRAKE ARM UNIT	1	
	50 (1)	VXL2747	LOADING RACK UNIT	1	
	51 (1)	VXP1732	CENTRE CLUTCH UNIT	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	52 (1)	VXZ0430	SS BRAKE ARM UNIT	1	
	60 (1)	VMA9516	TOP PLATE	1	
	61 (1)	VMB3047	CONNECTION SPRING	1	
	62 (1)	VMD2625	SIDE PLATE (L)	1	
	63 (1)	VXA5740	SIDE PLATE (R) UNIT	1	
	64 (1)	VXA5746	CASSETTE HOLDER UNIT	1	
	65 (1)	VXP1730	MAIN SHAFT UNIT	1	
	B1 (1)	VHD1117	SCREW	2	
	B2 (1)	VHD0842	SCREW	1	
	B3 (1)	VHD0843	SCREW	2	
	B4 (1)	VHD0844	SCREW	2	
	B5 (1)	XYN26+C5	SCREW	1	
	B6 (1)	VHD1066	SCREW	2	
	B7 (1)	VHD1044	SCREW	1	
	B8 (1)	VHD1060	SCREW	1	
	B9 (1)	VHD1071	SCREW	1	
	B11 (1)	XTS26+6F	SCREW	1	
	B12 (1)	XTN26+6F	SCREW	1	
	B13 (1)	XTN26+7J	SCREW	3	
	B14 (1)	VHD1095	SCREW	1	
	B15 (1)	VHD1185	SCREW	1	
	N1 (1)	VHN0311	PUSH NUT	1	
	W1 (1)	VMX2208	WASHER	1	
	W2 (1)	VMX2650	WASHER	2	

12.2. CASING PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & DescriptionT	Pcs	Remarks
	101 (2)	VGM1556	OP PANEL	1	[SUPPLIED FROM MBV]
					NV-HD642EE
					NV-HD647EE
	101 (2)	VGM1466	TOP PANEL	1	[SUPPLIED FROM MBV]
					NV-HD642EE-K
	102 (2)	VYP7142	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
					NV-HD642EE
	102 (2)	VYP7144	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
					NV-HD642EE-K
	102 (2)	VYP7156	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
					NV-HD647EE
	103 (2)	VKA0191	LEG	2	
	104 (2)	VKF3011	BLINDER PANEL	1	[SUPPLIED FROM MBV]
					NV-HD642EE
					NV-HD647EE
	104 (2)	VKF3037	BLINDER PANEL	1	[SUPPLIED FROM MBV]
					NV-HD642EE-K
	105 (2)	VMB2521	BLINDER SPRING	1	
	106 (2)	VKF3046	DOOR	1	[SUPPLIED FROM MBV]
					NV-HD647EE
	107 (2)	VMC1289	EARTH SPRING	1	NV-HD647EE
	110 (2)	RKA0072	FOOT	2	
	111 (2)	VMC1065	EARTH SPRING	1	
	115 (2)	VKU0519	BOTTOM PLATE	1	
	116 (2)	VJH1024	JACK PLATE	1	[SUPPLIED FROM MBV]
	117 (2)	VWJ1280	FLAT CARD CABLE (16P)	1	[SUPPLIED FROM MBV]
					P3001 - P501
	118 (2)	VWJ1281	FLAT CARD CABLE (6P)	1	[SUPPLIED FROM MBV]
					P4003 - A/C HEAD
	119 (2)	VWJ1282	FLAT CARD CABLE (9P)	1	[SUPPLIED FROM MBV]
					P2502 - P2901
	120 (2)	VWJ1279	FLAT CARD CABLE (8P)	1	[SUPPLIED FROM MBV]
					P7502 - P6501
					NV-HD647EE
	B101 (2)	XTW3+10TFC	SCREW	4	NV-HD642EE
					NV-HD647EE
	B101 (2)	XTW3+10TFZ	SCREW	4	NV-HD642EE-K
	B102 (2)	VHD0168	SCREW	2	
	B103 (2)	VHD0773	SCREW	2	
	B104 (2)	VHD1065	SCREW	3	
	B105 (2)	XTV26+6FR	SCREW	1	
	B106 (2)	XTV26+8FR	SCREW	3	

12.3. PACKING PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark △ have the special characteristics for safety. When replacing any of these components, use only the same type.

	Ref. No.	Part No.	Part Name & Description	Remarks	
⚠	201 (3)	VQT7902	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(ENGLISH POLISH)		NV-HD642EE/EE-K
⚠	201 (3)	VQT7903	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(CZECH HUNGARIAN)		NV-HD642EE/EE-K
⚠	201 (3)	VQT7916	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(ENGLISH POLISH)		NV-HD647EE
⚠	201 (3)	VQT7917	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(CZECH HUNGARIAN)		NV-HD647EE
	202 (3)	VEQ2224	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
					NV-HD642EE/EE-K
	202 (3)	VEQ2227	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
					NV-HD647EE
	203 (3)	VKF3025	BATTERY COVER	1	
	204 (3)	VGP4960	DOOR PANEL	1	
	205 (3)	VJA0963	DIN RF CABLE	1	
⚠	206 (3)	VJA1059	AC CORD	1	
	210 (3)	VPK2246	ACCESSORIES PACKING	1	[SUPPLIED FROM MBV]
	211 (3)	VPN5125	CUSHION (L)	1	[SUPPLIED FROM MBV]
	212 (3)	VPN5126	CUSHION (R)	1	[SUPPLIED FROM MBV]
	215 (3)	VPG9830	PACKING CASE	1	[SUPPLIED FROM MBV]
					NV-HD642EE
	215 (3)	VPG9831	PACKING CASE	1	[SUPPLIED FROM MBV]
					NV-HD642EE-K
	215 (3)	VPG9832	PACKING CASE	1	[SUPPLIED FROM MBV]
					NV-HD647EE
			SERVICE FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	1	
		VFK0335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		VFK1024	MOLYTONE GREASE	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
		VFK2744	16P EXTENSION CABLE	1	MAIN - POWER
		VFK1301	SILICONE GREASE	1	

12.4. ELECTRICAL PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicates the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	■	VEP06D11C	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:79)		(RTL) NV-HD642EE/EE-K
					THE FOLLOWING C.B.A.S ARE
					INCLUDED IN MAIN C.B.A.
					VEP07978B
					VEP07973D
					VEP07998H
	■	VEP07978B	TV DEMODULATOR PACK C.B.A	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11C).
	■	VEP07973D	NICAM DECODER PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11C).
	■	VEP07998H	OSD C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11C).
	■	VEP06D11F	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:84)		(RTL) NV-HD647EE
					THE FOLLOWING C.B.A.S ARE
					INCLUDED IN MAIN C.B.A.
					VEP07978B
					VEP07973D
					VEP07998G
	■	VEP07978B	TV DEMODULATOR PACK C.B.A	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11F).
	■	VEP07973D	NICAM DECODER PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11F).
	■	VEP07998G	OSD C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN C.B.A.
					(VEP06D11F).

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	■	VEP05377A	HEAD AMP C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:90)		(RTL)
⚠	■	VEP01826S	POWER C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:90)		(RTL) NV-HD642EE/EE-K
⚠	■	VEP01826Q	POWER C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:91)		(RTL) NV-HD647EE
	■	VEP07992A	AV FRONT C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:91)		(RTL) NV-HD647EE
	■	----------	CYLINDER STATOR C.B.A.	1	INCLUDED IN
			(Page:91)		CYLINDER STATOR UNIT
					(VEK7236).
	■	----------	CAPSTAN DRIVE C.B.A.	1	INCLUDED IN
					CAPSTAN UNIT (VEK8629).
⚠	TU7601	ENG47298G1	TUNER	1	[SUPPLIED FROM MBV]
⚠	F1101	XBA2C16TH15	FUSE	1	
	■	VEP06D11C	MAIN C.B.A.		[SUPPLIED FROM MBV]
					(RTL) NV-HD642EE/EE-K
	C0701	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C0704	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C0705	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0706	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0707	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0708	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0709	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0710	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0711	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
	C0712	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0713	ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	1	
	C0714	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0715	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0716	ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	1	
	C0717	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C0718	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
	C0719	ECUM1C474ZFM	C.CPAACITOR CH 16V 0.47U	1	
	C0720	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0721	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
	C0722	ECUM1H330JRV	C.CAPACITOR CH 50V 33P	1	
	C0723	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C0725	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0726	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0730	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0731	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C0732	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
	C1001	ECEA1AKG220	E.CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
	C1002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1003	ECEA1CGE470	E.CAPACITOR 16V 47U	1	
	C1004	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1005	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C1006	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1007	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1008	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C1010	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C1011	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C1201	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C1202	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1203	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C1204	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1205	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1206	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1207	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1208	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1501	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C2502	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2504	ECEA1EGE470	E.CAPACITOR 25V 47U	1	
	C2505	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C2506	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C2507	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2508	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2509	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2510	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2511	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2512	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C2513	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C2514	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C2516	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C2517	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C2518	ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
	C2519	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C2520	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
	C2521	ECEA1EKA470	E.CAPACITOR 25V 47U	1	
	C2522	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
	C2523	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2524	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2525	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2526	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2535	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C2536	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3002	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C3003	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C3004	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C3005	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
	C3007	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3008	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C3011	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C3012	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3013	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C3014	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C3015	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C3016	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C3017	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3018	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3019	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3020	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C3021	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	C3023	ECEA1HKAR33	E.CAPACITOR 50V 0.33U	1	
	C3024	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C3025	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3026	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3029	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C3030	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C3031	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
	C3032	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3033	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3034	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3035	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3036	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C3037	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3038	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3039	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C3040	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C3041	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C3042	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
	C3043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3044	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
	C3045	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C3046	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
	C3047	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C3048	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
	C3049	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
	C3050	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
	C3051	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
	C3054	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3055	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3056	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C3059	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C3060	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C4001	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
	C4002	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
	C4003	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C4004	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C4005	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	
	C4006	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C4007	ECUM1H122JCN	C.CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
	C4008	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C4010	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
	C4011	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
	C4012	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C4013	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C4014	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
	C4015	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C4016	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
	C4017	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
	C4018	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C4022	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4023	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4024	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4025	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4026	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C4027	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C4030	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C4031	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4032	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4033	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4034	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4035	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C4037	ECQB1H272JF	P.CAPACITOR 50V 2700P	1	
	C4038	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4039	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4040	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C4041	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4042	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4043	ECQB1H272JF	P.CAPACITOR 50V 2700P	1	
	C4045	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4046	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4047	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4048	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4049	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C4050	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
	C4051	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4052	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4053	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4054	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4055	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4060	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4061	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4062	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C4068	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
	C4070	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C4072	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C4073	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C4074	ECUM1H152JCN	C.CAPACITOR CH 50V 1500P	1	
	C4075	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C4906	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4907	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4908	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4909	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4912	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4913	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4914	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4915	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4916	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4917	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4918	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C4919	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4920	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4921	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C4922	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C4923	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4925	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
	C4928	ECEA1CKA220	E.CAPACITOR 16V 22U	1	
	C4929	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4930	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4931	ECEA1AKA470	E.CAPACITOR 10V 47U	1	
	C4933	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4934	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4935	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4936	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4937	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C4938	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6001	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C6002	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
	C6003	ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
	C6004	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
	C6005	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
	C6007	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
	C6009	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C6011	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C6012	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6013	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6019	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C6020	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C6022	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C6023	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C7301	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7302	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
	C7303	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7304	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
	C7307	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
	C7308	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
	C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C7312	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7313	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7315	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7316	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7317	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
	C7318	VCEA0JAW470	E.CAPACITOR 6.3V 47U	1	
	C7319	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
	C7320	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
	C7321	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7322	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C7323	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C7324	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7325	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7326	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7327	ECUM1C334KBN	C.CAPACITOR CH 16V 0.33U	1	
	C7328	ECUM1E333KBN	C.CAPACITOR CH 50V 0.033U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C7329	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
	C7330	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
	C7501	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7502	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
	C7505	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7506	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C7508	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7509	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7513	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7514	VCE0073	SUPER CAPACITOR	1	
	C7515	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C7519	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
	C7601	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7602	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7603	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7605	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
	C7606	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
	C7607	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7608	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7609	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7610	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
	C7614	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
	C7615	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C7616	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C7617	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C7618	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7619	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7620	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C7621	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C7701	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7702	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7705	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7708	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7709	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7711	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7712	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7713	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7714	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
	C7715	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7716	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
	C7717	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7718	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
	C7720	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7721	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C7722	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7723	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7724	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
	C7726	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
	C7728	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C7729	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7730	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7731	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
	C7732	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C7733	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C7734	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7735	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7736	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7739	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7740	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7743	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C7745	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7746	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7749	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C7750	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C7752	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7753	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7754	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7755	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7801	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7802	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C7803	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7804	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	D0701	1SS254	DIODE	1	
	D1003	1SS254	DIODE	1	
	D1004	MA4051-M	DIODE	1	
	D1005	1SS254	DIODE	1	
	D1006	MA4120-M	DIODE	1	
	D1009	MA4051-M	DIODE	1	
	D1010	1SS254	DIODE	1	
	D1011	11ES1	DIODE	1	
	D1012	11ES1	DIODE	1	
	D1013	MA723VT	DIODE	1	
	D1015	1SS254	DIODE	1	
	D1016	1SS254	DIODE	1	
	D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
	D1018	1SS254	DIODE	1	
	D1501	SIR505STA47	DIODE	1	
	D2502	1SS254	DIODE	1	
	D2504	1SS254	DIODE	1	
	D2505	1SS254	DIODE	1	
	D3001	1SS254	DIODE	1	
	D4903	1SS254	DIODE	1	
	D4905	MA4075-M	DIODE	1	
	D4906	MA4075-M	DIODE	1	
	D4907	MA4056N-M	DIODE	1	[SUPPLIED FROM MBV]
	D4908	MA700	DIODE	1	
	D6002	MA700	DIODE	1	
	D7302	BB135	DIODE	1	[SUPPLIED FROM MBV]
	D7521	MA4220	DIODE	1	
	D7523	MA723VT	DIODE	1	
	D7601	MA4300M	DIODE	1	
	D7603	1SS254	DIODE	1	
	D7604	1SS254	DIODE	1	
	D7701	1SS355	DIODE	1	
	D7702	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	D7801	MA4051-M	DIODE	1	
	D7802	1SS254	DIODE	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	DP7501	VSL0505	DISPLAY TUBE	1	[SUPPLIED FROM MBV]
	FL7301	VLF0633	FILTER	1	
	IC0701	NJM2234MA	IC	1	
	IC0702	LA7567NM	IC	1	
	IC1001	PQ20VB2E	IC	1	
	IC1201	UPC1093J	IC	1	
	IC1501	RPI354N	IC	1	
	IC1502	RPI354N	IC	1	
	IC2501	NJM2904M	IC	1	
	IC2502	AN3811NK	IC	1	
	IC3001	TDA9735HV2	IC	1	[SUPPLIED FROM MBV]
	IC4001	TDA9615H	IC	1	[SUPPLIED FROM MBV]
	IC4002	NJM4558M	IC	1	
	IC4902	MC14053BF	IC	1	
	IC4904	MC14052BF	IC	1	
	IC6001	M37777VFEX	IC	1	[SUPPLIED FROM MBV]
	IC7301	TDA9874H	IC	1	[SUPPLIED FROM MBV]
	IC7302	PST7043	IC	1	
	IC7501	M35500AFP	IC	1	
	IC7502	S80743AL	IC	1	
	IC7504	PNA4611M02VT	IR RECEIVER UNIT	1	
	IC7505	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
	IC7701	M35063WVAV	IC	1	[SUPPLIED FROM MBV]
	IC7702	M27C1024BCAA	IC	1	[SUPPLIED FROM MBV]
	IC7703	M30622VGDX	IC	1	[SUPPLIED FROM MBV]
	IC7801	M24C16-WBN6	IC	1	
⚠	IP1001	UNH000300A	IC PROTECTOR	1	
⚠	IP1201	UNH000300A	IC PROTECTOR	1	
⚠	IP1202	UNH000300A	IC PROTECTOR	1	
⚠	IP7601	VSF0015A025	IC PROTECTOR	1	
⚠	IP7801	UNH000300A	IC PROTECTOR	1	
	JK4901	VJJ0377	RCA JACK	1	
	JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
	K0701	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K0702	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
	K0703	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K0707	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K4001	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K4004	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4009	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4907	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K6002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K7302	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K7304	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	K7601	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7603	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7709	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	L0702	ELJFAR27JB	CHIP INDUCTOR 0.27UH	1	[SUPPLIED FROM MBV]
	L0703	ELJFA4R7JB	CHIP INDUCTOR 4.7UH	1	[SUPPLIED FROM MBV]
	L0704	ELESE4R7KA	INDUCTOR 4.7UH	1	[SUPPLIED FROM MBV]
	L0705	ELJFAR68JB	CHIP INDUCTOR 0.68UH	1	[SUPPLIED FROM MBV]
	L2502	VLQ0599J101	COIL 100UH	1	
	L2503	VLQ0599J680	COIL 68UH	1	
	L3001	VLQ0599J220	COIL 22UH	1	
	L3003	VLQ0599J100	COIL 10UH	1	
	L3004	VLQ0599J100	COIL 10UH	1	
	L3005	VLQ0599J100	COIL 10UH	1	
	L3006	VLQ0599J100	COIL 10UH	1	
	L3007	VLQ0599J100	COIL 10UH	1	
	L3008	VLQ0599J100	COIL 10UH	1	
	L3009	VLQ0599J390	COIL 39UH	1	
	L3010	VLQ0599J560	COIL 56UH	1	
	L4001	ELELN153JA	INDUCTOR	1	[SUPPLIED FROM MBV]
	L4007	VLQ0599J680	COIL 68UH	1	
	L4904	VLQ0599J330	COIL 33UH	1	
	L7301	VLQ0599J3R3	COIL 3.3UH	1	
	L7302	VLQ0599J1R0	COIL 1UH	1	
	L7601	VLP0125	COIL	1	
	L7602	VLQ0599J2R7	COIL 2.7UH	1	
	L7603	VLQ0599J330	COIL 33UH	1	
	L7604	VLP0125	COIL	1	
	L7605	VLP0125	COIL	1	
	L7606	VLP0125	COIL	1	
	L7609	VLQ0599J100	COIL 10UH	1	
	L7701	ELESE390KA	INDUCTOR 39UH	1	
	L7702	ELESE390KA	INDUCTOR 39UH	1	
	L7703	ELESN270KA	INDUCTOR 27UH	1	
	L7704	ELESE390KA	INDUCTOR 39UH	1	
	L7706	ELESE100KA	INDUCTOR 10UH	1	
	L7707	ELESE100KA	INDUCTOR 10UH	1	
	L7708	ELESE390KA	INDUCTOR 39UH	1	
	LB0701	VLP0147	COIL	1	
	LB3001	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	LB3002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	LB4901	VLP0147	COIL	1	
	LB4902	VLP0147	COIL	1	
	LB4903	VLP0147	COIL	1	
	LB4904	VLP0147	COIL	1	
	LB4905	VLP0147	COIL	1	
	LB4906	VLP0147	COIL	1	
	LB4907	VLP0147	COIL	1	
	LB4908	VLP0147	COIL	1	
	LB4909	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	LB4910	VLP0125	COIL	1	
	LB4915	VLP0125	COIL	1	
	LB7301	VLP0150	COIL	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	LB7302	VLP0150	COIL	1	
	LB7303	VLP0150	COIL	1	
	LB7304	VLP0150	COIL	1	
	LB7601	VLP0125	COIL	1	
	LB7701	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
	P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
	P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
	P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
	P3001	VJS3537A016G	CONNECTOR (FEMALE) 16P	1	
	P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
	P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
	PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
	PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
	PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
	PK7701	VJR0777B015W	CONNECTOR (MALE) 15P	1	
	PK7702	VJR0777B015W	CONNECTOR (MALE) 15P	1	
	PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
	Q0701	2SB709	TRANSISTOR	1	
	Q0703	2SB709A-R	TRANSISTOR	1	
	Q0704	2SD601A	TRANSISTOR	1	
	Q1001	2SD601A	TRANSISTOR	1	
	Q1002	2SD602A	TRANSISTOR	1	
	Q1003	2SD1996-S	TRANSISTOR	1	
	Q1004	2SB710A	TRANSISTOR	1	
	Q1005	2SD25440PQA	TRANSISTOR	1	
	Q1006	2SD1996-S	TRANSISTOR	1	
	Q1007	2SD602A-R	TRANSISTOR	1	
	Q1008	2SD601A	TRANSISTOR	1	
	Q1009	2SD1996-S	TRANSISTOR	1	
	Q1201	2SD2259	TRANSISTOR	1	
	Q1202	2SD1996-S	TRANSISTOR	1	
	Q1501	PNB2301MBV	TRANSISTOR	1	
	Q1502	PNB2301MAV	TRANSISTOR	1	
	Q3003	2SB709A	TRANSISTOR	1	
	Q4001	2SD1149	TRANSISTOR	1	
	Q4002	2SD601A	TRANSISTOR	1	
	Q4006	2SB710-R	TRANSISTOR	1	
	Q4007	2SD602A-R	TRANSISTOR	1	
	Q4903	2SD601A	TRANSISTOR	1	
	Q4904	2SD601A	TRANSISTOR	1	
	Q4905	2SD1328-S	TRANSISTOR	1	
	Q4906	2SB709A	TRANSISTOR	1	
	Q4907	2SD601A	TRANSISTOR	1	
	Q4908	2SB709A	TRANSISTOR	1	
	Q4909	2SD601A	TRANSISTOR	1	
	Q4911	2SB709A	TRANSISTOR	1	
	Q7601	2SD601A	TRANSISTOR	1	
	Q7602	2SD1328-S	TRANSISTOR	1	
	Q7603	2SD1328-S	TRANSISTOR	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	Q7604	2SD1328-S	TRANSISTOR	1	
	Q7605	2SB709A	TRANSISTOR	1	
	Q7606	2SD1328-S	TRANSISTOR	1	
	Q7701	2SD1819A	TRANSISTOR	1	
	Q7702	2SB1218A	TRANSISTOR	1	
	Q7703	2SD1819A	TRANSISTOR	1	
	Q7704	2SD1819A	TRANSISTOR	1	
	Q7706	2SB1218A	TRANSISTOR	1	
	Q7707	2SB1218A	TRANSISTOR	1	
	Q7708	2SD1819A	TRANSISTOR	1	
	Q7709	2SB1218A	TRANSISTOR	1	
	Q7710	2SD1819A	TRANSISTOR	1	
	Q7711	2SD1819A	TRANSISTOR	1	
	Q7712	2SD1819A	TRANSISTOR	1	
	Q7801	2SD1996-S	TRANSISTOR	1	
	QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
	QR1002	MUN2213	TRANSISTOR-RESISTOR	1	
	QR1003	MUN2211	TRANSISTOR-RESISTOR	1	
	QR1005	MUN2213	TRANSISTOR-RESISTOR	1	
	QR1006	MUN2112	TRANSISTOR-RESISTOR	1	
	QR2504	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3001	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3002	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3003	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3006	MUN2212	TRANSISTOR-RESISTOR	1	
	QR3007	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4001	UN2217	TRANSISTOR-RESISTOR	1	
	QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
	QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
	QR4007	UN2215	TRANSISTOR	1	
	QR4008	UN2215	TRANSISTOR	1	
	QR4901	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4902	MUN2111	TRANSISTOR-RESISTOR	1	
	QR4903	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4904	MUN2211	TRANSISTOR-RESISTOR	1	
	QR4905	MUN2212	TRANSISTOR-RESISTOR	1	
	QR6001	MUN2111	TRANSISTOR-RESISTOR	1	
	QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
	QR6003	MUN2212	TRANSISTOR-RESISTOR	1	
	QR7601	MUN2213	TRANSISTOR-RESISTOR	1	
	QR7703	UN5213	TRANSISTOR-RESISTOR	1	
	R0701	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0702	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0703	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R0704	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0705	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0706	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R0708	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R0709	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0710	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R0711	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R0712	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
	R0713	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R0714	ERJ3GEYG561	M.RESISTOR CH 1/16W 560	1	
	R0715	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
	R0717	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R0718	ERJ3GEYJ111	M.RESISTOR CH 1/16W 110	1	
	R0719	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0720	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R0721	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R0722	ERJ3GEYJ301	M.RESISTOR CH 1/16W 300	1	
	R0723	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R0724	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
	R0725	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
	R0726	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0727	ERJ3GEYJ513	M.RESISTOR CH 1/16W 51K	1	
	R0729	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R0730	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R0731	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R0732	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0733	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0736	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R0737	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R0740	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R0741	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R1001	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1002	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1003	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R1004	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R1005	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
	R1006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R1007	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1008	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1009	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1010	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1011	ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	
	R1012	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
	R1013	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
	R1014	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
	R1015	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
	R1016	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
	R1017	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
	R1018	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R1019	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R1022	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1023	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
	R1024	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1025	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1026	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1027	ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
	R1201	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
	R1202	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
	R1203	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
	R2501	ERDS2TJ391	C.RESISTOR 1/4W 390	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R2502	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2504	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
	R2505	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
	R2506	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R2507	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2510	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2511	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
	R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
	R2514	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2515	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R2516	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
	R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
	R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2532	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
	R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
	R3003	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R3004	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R3005	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R3006	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
	R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R3011	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3012	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
	R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	
	R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
	R3027	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
	R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
	R3030	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
	R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
	R3032	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
	R3033	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R3034	ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
	R3035	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
	R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R3041	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
	R3042	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R3043	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
	R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
	R4002	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
	R4003	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4004	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R4005	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R4006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4007	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R4008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4009	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
	R4010	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
	R4011	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4014	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
	R4015	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
	R4016	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
	R4024	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4025	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4026	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4027	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4028	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4029	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4030	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4031	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4036	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4038	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4039	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4040	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R4041	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R4042	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4043	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4044	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
	R4045	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4046	ERJ6RBD393	M.RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
	R4047	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4048	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
	R4049	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4050	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4051	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4052	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4053	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4054	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4055	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
	R4056	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
	R4057	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4058	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
	R4060	ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	1	
	R4061	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R4062	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R4063	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R4067	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4068	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4069	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4070	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4071	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4072	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R4909	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R4910	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R4911	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4912	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R4913	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
	R4915	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4921	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4923	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4924	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4925	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4926	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4927	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4928	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4929	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4930	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4933	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4937	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4938	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R4939	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4940	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R4941	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4943	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4944	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4945	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4946	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R4947	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4949	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4950	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4955	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
	R4956	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R4957	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R4961	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
	R4962	ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
	R6001	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6003	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6008	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R6009	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R6010	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6012	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6013	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6014	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
	R6015	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6016	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6017	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R6018	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R6019	ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
	R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6021	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
	R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6025	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
	R6027	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
	R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6034	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6037	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6038	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6040	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R6063	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7305	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	R7306	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R7318	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7324	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7325	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R7326	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R7328	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7329	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7501	ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
	R7502	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	1	
	R7503	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	1	
	R7505	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7506	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7507	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7508	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7509	ERJ6GMYG822	M.RESISTOR CH 1/10W 8.2K	1	
	R7510	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
	R7511	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7512	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7514	ERJ6GMYG822	M.RESISTOR CH 1/10W 8.2K	1	
	R7515	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
	R7516	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7517	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7520	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7521	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7523	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7524	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7525	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7527	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
	R7528	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7533	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7534	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R7535	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7601	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7602	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R7606	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7607	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7608	ERG2SJ331	M.RESISTOR 2W 330	1	
	R7609	ERG2SJ331	M.RESISTOR 2W 330	1	
	R7612	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R7613	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R7614	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R7615	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7616	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R7617	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
	R7620	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
	R7621	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
	R7622	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R7623	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R7705	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R7707	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R7708	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7709	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7710	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7711	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7712	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7713	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7714	ERJ3GEYG153	M.RESISTOR CH 1/16W 15K	1	
	R7715	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
	R7716	ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
	R7717	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7719	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7720	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
	R7721	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
	R7722	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
	R7723	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7724	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7725	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7727	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7728	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7729	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7730	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R7731	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R7732	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R7733	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R7734	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7735	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7736	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7737	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
	R7738	ERJ3GEYK225	M.RESISTOR CH 1/16W 2.2M	1	
	R7739	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7740	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7741	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7742	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7743	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7744	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7746	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7747	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7748	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7750	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7751	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7752	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7753	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
	R7754	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7755	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7756	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R7757	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7759	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R7760	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7761	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7763	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7764	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7765	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7766	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7767	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7770	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7771	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7772	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7773	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7774	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7775	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7776	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7777	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7778	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7779	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7780	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7781	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7782	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7783	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7784	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7785	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7792	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7793	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7794	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7795	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7796	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7797	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7798	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7799	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7801	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
	R7802	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R7803	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	S1501	VSS0520	MODE SELECT SWITCH	1	
	S7503	EVQ11L07B	SWITCH	1	
	S7504	EVQ11L07B	SWITCH	1	
	S7505	VES0834	S-TAB SWITCH	1	
	S7506	EVQ11L07B	SWITCH	1	
	S7507	EVQ11L07B	SWITCH	1	
	S7509	EVQ11L07B	SWITCH	1	
	S7510	EVQ11L07B	SWITCH	1	
	S7516	EVQ11L07B	SWITCH	1	
	T0701	EQV5EC080A	TRANSFORMER	1	
	T4002	EQQ7QF024P	TRANSFORMER	1	
⚠	TU7601	ENG47298G1	TUNER	1	[SUPPLIED FROM MBV]
	VR0701	EVNCBAA00B24	V.RESISTOR 20K	1	
	VR3012	EVNCYAA03B53	V.RESISTOR 5K	1	

	[illegible]	[illegible]	[illegible]	[illegible]	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VR3013	EVNCYAA03B53	V.RESISTOR 5K	1	
	X0701	VLF1430	TRANSFORMER	1	[SUPPLIED FROM MBV]
	X0702	VLF1431	TRANSFORMER	1	[SUPPLIED FROM MBV]
	X0704	EFCT6R0KS4	FILTER	1	
	X0705	EFCS5R5MS5	FILTER	1	
	X0706	EFCS6R5MS5	CRYSTAL OSCILLATOR	1	
	X0707	VLF1288	SAW FILTER	1	
	X0710	EFCS3F02W3B	CRYSTAL OSCILLATOR	1	
	X3001	VSX0162	CRYSTAL OSCILLATOR	1	
	X6001	VSX0830	CRYSTAL OSCILLATOR	1	
	X6002	VSX0660	CRYSTAL OSCILLATOR	1	
	X7302	VSX0953	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
	X7701	VSX1043	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
			MISCELLANEOUS		
		VXQ0648	FIP HOLDER	1	
		VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C.B.A
		VSC4753	SHIELD CASE (BOTTOM)	1	[SUPPLIED FROM MBV]
					FOR NICAM DECODER C.B.A.
		VSC4752	SHIELD CASE (MAIN)	1	[SUPPLIED FROM MBV]
					FOR NICAM DECODER C.B.A.
		VMP4894	SUPPORT ANGLE	1	FOR OSD C.B.A.
	■	VEP06D11F	MAIN C.B.A.		[SUPPLIED FROM MBV]
					(RTL) NV-HD647EE
	C0701	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C0704	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C0705	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0706	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0707	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0708	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0709	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0710	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0711	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
	C0712	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0713	ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	1	
	C0714	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0715	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0716	ECUM1H473KBN	C.CAPACITOR CH 50V 0.047U	1	
	C0717	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C0718	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
	C0719	ECUM1C474ZFM	C.CPAACITOR CH 16V 0.47U	1	
	C0720	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0721	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
	C0722	ECUM1H330JRV	C.CAPACITOR CH 50V 33P	1	
	C0723	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C0725	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0726	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C0730	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C0731	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
	C0732	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C1001	ECEA1AKG220	E.CAPACITOR 10V 22U	1	[SUPPLIED FROM MBV]
	C1002	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1003	ECEA1CGE470	E.CAPACITOR 16V 47U	1	
	C1004	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1005	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C1006	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1007	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1008	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C1010	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C1011	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C1201	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C1202	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1203	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C1204	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1205	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1206	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1207	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C1208	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C1501	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C2502	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2504	ECEA1EGE470	E.CAPACITOR 25V 47U	1	
	C2505	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C2506	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C2507	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2508	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2509	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2510	ECUM1H563ZFN	C.CAPACITOR CH 50V 0.056U	1	
	C2511	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2512	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C2513	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C2514	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C2516	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C2517	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C2518	ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
	C2519	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C2520	ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
	C2521	ECEA1EKA470	E.CAPACITOR 25V 47U	1	
	C2522	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
	C2523	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2524	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2525	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C2526	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	1	
	C2535	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C2536	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3002	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C3003	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C3004	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C3005	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
	C3007	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3008	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C3011	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C3012	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3013	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3014	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C3015	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C3016	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C3017	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3018	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3019	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3020	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C3021	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	C3023	ECEA1HKAR33	E.CAPACITOR 50V 0.33U	1	
	C3024	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C3025	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3026	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3029	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C3030	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C3031	ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
	C3032	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3033	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3034	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C3035	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3036	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C3037	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3038	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C3039	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C3040	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C3041	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C3042	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
	C3043	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C3044	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
	C3045	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C3046	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
	C3047	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C3048	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
	C3049	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
	C3050	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
	C3051	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
	C3054	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3055	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C3056	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C3059	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C3060	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C4001	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
	C4002	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
	C4003	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C4004	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C4005	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	
	C4006	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C4007	ECUM1H122JCN	C.CAPACITOR CH 50V 1200P	1	[SUPPLIED FROM MBV]
	C4008	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C4010	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
	C4011	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
	C4012	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C4013	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C4014	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
	C4015	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C4016	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C4017	ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
	C4018	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4019	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C4020	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4021	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4022	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4023	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4024	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4025	ECA1HAKR22X	E.CAPACITOR 50V 0.22U	1	[SUPPLIED FROM MBV]
	C4026	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C4027	ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
	C4030	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C4031	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4032	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4033	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4034	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4035	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C4037	ECQB1H272JF	P.CAPACITOR 50V 2700P	1	
	C4038	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4039	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4040	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C4041	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4042	ECA1CAK470X	E.CAPACITOR 16V 47U	1	
	C4043	ECQB1H272JF	P.CAPACITOR 50V 2700P	1	
	C4045	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C4046	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4047	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4048	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4049	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C4050	ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
	C4051	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4052	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4053	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4054	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4055	ECA1CAK100X	E.CAPACITOR 16V 10U	1	
	C4060	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4061	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4062	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C4068	ECQV1H154JM	P.CAPACITOR 50V 0.15U	1	
	C4070	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
	C4072	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C4073	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C4074	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
	C4075	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C4076	ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
	C4077	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C4078	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C4079	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4080	ECEA1AKA220	E.CAPACITOR 10V 22U	1	
	C4906	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4907	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4908	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4909	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4912	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C4913	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4914	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4915	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C4916	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4917	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4918	ECUM1H471KBN	C.CAPACITOR CH 50V 470P	1	
	C4919	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C4920	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4921	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C4922	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C4923	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C4925	ECEA1CKA470	E.CAPACITOR 16V 47U	1	
	C4928	ECEA1CKA220	E.CAPACITOR 16V 22U	1	
	C4929	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4930	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C4931	ECEA1AKA470	E.CAPACITOR 10V 47U	1	
	C4933	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4934	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4935	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4936	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C4937	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C4938	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6001	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
	C6002	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
	C6003	ECUM1H200JCN	C.CAPACITOR CH 50V 20P	1	
	C6004	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	
	C6005	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
	C6007	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
	C6009	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
	C6011	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C6012	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6013	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
	C6018	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
	C6019	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C6020	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C6021	ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
	C6022	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C6023	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
	C6024	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7301	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7302	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
	C7303	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7304	VCEA0JAW101	E.CAPACITOR 6.3V 100U	1	
	C7307	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
	C7308	ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
	C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C7312	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7313	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7315	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7316	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7317	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
	C7318	VCEA0JAW470	E.CAPACITOR 6.3V 47U	1	
	C7319	VCEA1CAW100	E.CAPACITOR 16V 10U	1	
	C7320	VCEA1CAW100	E.CAPACITOR 16V 10U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C7321	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7322	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C7323	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
	C7324	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7325	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7326	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7327	ECUM1C334KBN	C.CAPACITOR CH 16V 0.33U	1	
	C7328	ECUM1E333KBN	C.CAPACITOR CH 50V 0.033U	1	
	C7329	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
	C7330	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
	C7501	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7502	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
	C7505	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7506	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
	C7508	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7509	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7513	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7514	VCE0073	SUPER CAPACITOR	1	
	C7515	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C7519	ECUM1E683KBN	C.CAPACITOR CH 25V 0.068U	1	
	C7601	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7602	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7603	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7605	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
	C7606	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
	C7607	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7608	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7609	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	C7610	ECEA1HKA100	E.CAPACITOR 50V 10U	1	
	C7614	ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
	C7615	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	C7616	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
	C7617	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C7618	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7619	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C7620	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C7621	ECA1HAK2R2X	E.CAPACITOR 50V 2.2U	1	[SUPPLIED FROM MBV]
	C7701	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7702	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7705	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7708	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7709	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7711	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7712	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7713	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
	C7714	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
	C7715	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7716	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
	C7717	ECUX1A105ZFV	C.CAPACITOR CH 10V 1U	1	
	C7718	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
	C7720	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7721	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C7722	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7723	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	C7724	ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
	C7726	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
	C7728	ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
	C7729	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7730	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7731	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
	C7732	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C7733	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	C7734	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7735	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7736	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7739	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7740	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7743	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	C7745	ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
	C7746	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	C7749	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C7750	ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
	C7752	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7753	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7754	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7755	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
	C7801	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
	C7802	ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
	C7803	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
	C7804	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
	D0701	1SS254	DIODE	1	
	D1003	1SS254	DIODE	1	
	D1004	MA4051-M	DIODE	1	
	D1005	1SS254	DIODE	1	
	D1006	MA4120-M	DIODE	1	
	D1009	MA4051-M	DIODE	1	
	D1010	1SS254	DIODE	1	
	D1011	11ES1	DIODE	1	
	D1012	11ES1	DIODE	1	
	D1013	MA723VT	DIODE	1	
	D1015	1SS254	DIODE	1	
	D1016	1SS254	DIODE	1	
	D1017	MA4120N-M	DIODE	1	[SUPPLIED FROM MBV]
	D1018	1SS254	DIODE	1	
	D1501	SIR505STA47	DIODE	1	
	D2502	1SS254	DIODE	1	
	D2504	1SS254	DIODE	1	
	D2505	1SS254	DIODE	1	
	D3001	1SS254	DIODE	1	
	D4001	1SS254	DIODE	1	
	D4903	1SS254	DIODE	1	
	D4905	MA4075-M	DIODE	1	
	D4906	MA4075-M	DIODE	1	
	D4907	MA4056N-M	DIODE	1	[SUPPLIED FROM MBV]
	D4908	MA700	DIODE	1	
	D6001	MA700	DIODE	1	
	D6002	MA700	DIODE	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	D7302	BB135	DIODE	1	[SUPPLIED FROM MBV]
	D7521	MA4220	DIODE	1	
	D7523	MA723VT	DIODE	1	
	D7601	MA4300M	DIODE	1	
	D7603	1SS254	DIODE	1	
	D7604	1SS254	DIODE	1	
	D7701	1SS355	DIODE	1	
	D7702	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	D7801	MA4051-M	DIODE	1	
	D7802	1SS254	DIODE	1	
	DP7501	VSL0505	DISPLAY TUBE	1	[SUPPLIED FROM MBV]
	FL7301	VLF0633	FILTER	1	
	IC0701	NJM2234MA	IC	1	
	IC0702	LA7567NM	IC	1	
	IC1001	PQ20VB2E	IC	1	
	IC1201	UPC1093J	IC	1	
	IC1501	RPI354N	IC	1	
	IC1502	RPI354N	IC	1	
	IC2501	NJM2904M	IC	1	
	IC2502	AN3811NK	IC	1	
	IC3001	TDA9735HV2	IC	1	[SUPPLIED FROM MBV]
	IC4001	TDA9615H	IC	1	[SUPPLIED FROM MBV]
	IC4002	NJM4558M	IC	1	
	IC4901	MC14053BF	IC	1	
	IC4902	MC14053BF	IC	1	
	IC4904	MC14052BF	IC	1	
	IC6001	M37777VFEX	IC	1	[SUPPLIED FROM MBV]
	IC7301	TDA9874H	IC	1	[SUPPLIED FROM MBV]
	IC7302	PST7043	IC	1	
	IC7501	M35500AFP	IC	1	
	IC7502	S80743AL	IC	1	
	IC7504	PNA4611M02VT	IR RECEIVER UNIT	1	
	IC7505	RN5VD28AA	IC	1	[SUPPLIED FROM MBV]
	IC7701	M35063WVAV	IC	1	[SUPPLIED FROM MBV]
	IC7702	M27C1024BCAA	IC	1	[SUPPLIED FROM MBV]
	IC7703	M30622VGDX	IC	1	[SUPPLIED FROM MBV]
	IC7801	M24C16-WBN6	IC	1	
⚠	IP1001	UNH000300A	IC PROTECTOR	1	
⚠	IP1201	UNH000300A	IC PROTECTOR	1	
⚠	IP1202	UNH000300A	IC PROTECTOR	1	
⚠	IP7601	VSF0015A025	IC PROTECTOR	1	
⚠	IP7801	UNH000300A	IC PROTECTOR	1	
	JK4901	VJJ0377	RCA JACK	1	
	JK4903	VJS3634	21-PIN SCART JACK	1	[SUPPLIED FROM MBV]
	K0701	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K0702	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	K0703	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K0707	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	K4001	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K4005	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4006	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4009	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K6002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7301	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K7302	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K7304	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	K7601	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7603	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	K7709	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	L0702	ELJFAR27JB	CHIP INDUCTOR 0.27UH	1	[SUPPLIED FROM MBV]
	L0703	ELJFA4R7JB	CHIP INDUCTOR 4.7UH	1	[SUPPLIED FROM MBV]
	L0704	ELESE4R7KA	INDUCTOR 4.7UH	1	[SUPPLIED FROM MBV]
	L0705	ELJFAR68JB	CHIP INDUCTOR 0.68UH	1	[SUPPLIED FROM MBV]
	L2502	VLQ0599J101	COIL 100UH	1	
	L2503	VLQ0599J680	COIL 68UH	1	
	L3001	VLQ0599J220	COIL 22UH	1	
	L3003	VLQ0599J100	COIL 10UH	1	
	L3004	VLQ0599J100	COIL 10UH	1	
	L3005	VLQ0599J100	COIL 10UH	1	
	L3006	VLQ0599J100	COIL 10UH	1	
	L3007	VLQ0599J100	COIL 10UH	1	
	L3008	VLQ0599J100	COIL 10UH	1	
	L3009	VLQ0599J390	COIL 39UH	1	
	L3010	VLQ0599J560	COIL 56UH	1	
	L4001	ELELN153JA	INDUCTOR	1	[SUPPLIED FROM MBV]
	L4006	VLQ0599J680	COIL 68UH	1	
	L4007	VLQ0599J680	COIL 68UH	1	
	L4904	VLQ0599J330	COIL 33UH	1	
	L6001	VLQ0599J221	COIL 220UH	1	
	L7301	VLQ0599J3R3	COIL 3.3UH	1	
	L7302	VLQ0599J1R0	COIL 1UH	1	
	L7601	VLP0125	COIL	1	
	L7602	VLQ0599J2R7	COIL 2.7UH	1	
	L7603	VLQ0599J330	COIL 33UH	1	
	L7604	VLP0125	COIL	1	
	L7605	VLP0125	COIL	1	
	L7606	VLP0125	COIL	1	
	L7609	VLQ0599J100	COIL 10UH	1	
	L7701	ELESE390KA	INDUCTOR 39UH	1	
	L7702	ELESE390KA	INDUCTOR 39UH	1	
	L7703	ELESN270KA	INDUCTOR 27UH	1	
	L7704	ELESE390KA	INDUCTOR 39UH	1	
	L7706	ELESE100KA	INDUCTOR 10UH	1	
	L7707	ELESE100KA	INDUCTOR 10UH	1	
	L7708	ELESE390KA	INDUCTOR 39UH	1	
	LB0701	VLP0147	COIL	1	
	LB3001	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	LB3002	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	LB4901	VLP0147	COIL	1	
	LB4902	VLP0147	COIL	1	
	LB4903	VLP0147	COIL	1	
	LB4904	VLP0147	COIL	1	
	LB4905	VLP0147	COIL	1	
	LB4906	VLP0147	COIL	1	
	LB4907	VLP0147	COIL	1	
	LB4908	VLP0147	COIL	1	
	LB4909	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	LB4910	VLP0125	COIL	1	
	LB4915	VLP0125	COIL	1	
	LB7301	VLP0150	COIL	1	
	LB7302	VLP0150	COIL	1	
	LB7303	VLP0150	COIL	1	
	LB7304	VLP0150	COIL	1	
	LB7601	VLP0125	COIL	1	
	LB7701	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	P1001	VJS3917A016W	CONNECTOR (FEMALE) 16P	1	
	P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
	P2501	VJP3835A012	CONNECTOR (MALE) 12P	1	
	P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	1	
	P3001	VJS3537A016G	CONNECTOR (FEMALE) 16P	1	
	P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	1	
	P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	1	
	P7502	VJS3537A008G	CONNECTOR (FEMALE) 8P	1	
	PK0701	VJR0816E010W	CONNECTOR (MALE) 10P	1	
	PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	1	
	PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	1	
	PK7701	VJR0777B015W	CONNECTOR (MALE) 15P	1	
	PK7702	VJR0777B015W	CONNECTOR (MALE) 15P	1	
	PP0701	VJP3589A004B	CONNECTOR (MALE) 4P	1	
	Q0701	2SB709	TRANSISTOR	1	
	Q0703	2SB709A-R	TRANSISTOR	1	
	Q0704	2SD601A	TRANSISTOR	1	
	Q1001	2SD601A	TRANSISTOR	1	
	Q1002	2SD602A	TRANSISTOR	1	
	Q1003	2SD1996-S	TRANSISTOR	1	
	Q1004	2SB710A	TRANSISTOR	1	
	Q1005	2SD25440PQA	TRANSISTOR	1	
	Q1006	2SD1996-S	TRANSISTOR	1	
	Q1007	2SD602A-R	TRANSISTOR	1	
	Q1008	2SD601A	TRANSISTOR	1	
	Q1009	2SD1996-S	TRANSISTOR	1	
	Q1201	2SD2259	TRANSISTOR	1	
	Q1202	2SD1996-S	TRANSISTOR	1	
	Q1501	PNB2301MBV	TRANSISTOR	1	
	Q1502	PNB2301MAV	TRANSISTOR	1	
	Q3003	2SB709A	TRANSISTOR	1	
	Q4001	2SD1149	TRANSISTOR	1	
	Q4002	2SD601A	TRANSISTOR	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	Q4004	2SB710-R	TRANSISTOR	1	
	Q4005	2SD602A-R	TRANSISTOR	1	
	Q4006	2SB710-R	TRANSISTOR	1	
	Q4007	2SD602A-R	TRANSISTOR	1	
	Q4903	2SD601A	TRANSISTOR	1	
	Q4904	2SD601A	TRANSISTOR	1	
	Q4905	2SD1328-S	TRANSISTOR	1	
	Q4906	2SB709A	TRANSISTOR	1	
	Q4907	2SD601A	TRANSISTOR	1	
	Q4908	2SB709A	TRANSISTOR	1	
	Q4909	2SD601A	TRANSISTOR	1	
	Q4911	2SB709A	TRANSISTOR	1	
	Q7501	2SB709A	TRANSISTOR	1	
	Q7502	2SD1994	TRANSISTOR	1	
	Q7601	2SD601A	TRANSISTOR	1	
	Q7602	2SD1328-S	TRANSISTOR	1	
	Q7603	2SD1328-S	TRANSISTOR	1	
	Q7604	2SD1328-S	TRANSISTOR	1	
	Q7605	2SB709A	TRANSISTOR	1	
	Q7606	2SD1328-S	TRANSISTOR	1	
	Q7701	2SD1819A	TRANSISTOR	1	
	Q7702	2SB1218A	TRANSISTOR	1	
	Q7703	2SD1819A	TRANSISTOR	1	
	Q7704	2SD1819A	TRANSISTOR	1	
	Q7706	2SB1218A	TRANSISTOR	1	
	Q7707	2SB1218A	TRANSISTOR	1	
	Q7708	2SD1819A	TRANSISTOR	1	
	Q7709	2SB1218A	TRANSISTOR	1	
	Q7710	2SD1819A	TRANSISTOR	1	
	Q7711	2SD1819A	TRANSISTOR	1	
	Q7712	2SD1819A	TRANSISTOR	1	
	Q7801	2SD1996-S	TRANSISTOR	1	
	QR1001	MUN2112	TRANSISTOR-RESISTOR	1	
	QR1002	MUN2213	TRANSISTOR-RESISTOR	1	
	QR1003	MUN2211	TRANSISTOR-RESISTOR	1	
	QR1005	MUN2213	TRANSISTOR-RESISTOR	1	
	QR1006	MUN2112	TRANSISTOR-RESISTOR	1	
	QR2504	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3001	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3002	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3003	MUN2213	TRANSISTOR-RESISTOR	1	
	QR3006	MUN2212	TRANSISTOR-RESISTOR	1	
	QR3007	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4001	UN2217	TRANSISTOR-RESISTOR	1	
	QR4002	MUN2113	TRANSISTOR-RESISTOR	1	
	QR4003	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4004	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4006	MUN2111	TRANSISTOR-RESISTOR	1	
	QR4007	UN2215	TRANSISTOR	1	
	QR4008	UN2215	TRANSISTOR	1	
	QR4901	MUN2212	TRANSISTOR-RESISTOR	1	
	QR4902	MUN2111	TRANSISTOR-RESISTOR	1	
	QR4903	MUN2212	TRANSISTOR-RESISTOR	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	QR4904	MUN2211	TRANSISTOR-RESISTOR	1	
	QR4905	MUN2212	TRANSISTOR-RESISTOR	1	
	QR6001	MUN2111	TRANSISTOR-RESISTOR	1	
	QR6002	MUN2211	TRANSISTOR-RESISTOR	1	
	QR6003	MUN2212	TRANSISTOR-RESISTOR	1	
	QR6004	MUN2212	TRANSISTOR-RESISTOR	1	
	QR7601	MUN2213	TRANSISTOR-RESISTOR	1	
	QR7703	UN5213	TRANSISTOR-RESISTOR	1	
	R0701	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0702	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0703	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
	R0704	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0705	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0706	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R0708	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R0709	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0710	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
	R0711	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
	R0712	ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
	R0713	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R0714	ERJ3GEYG561	M.RESISTOR CH 1/16W 560	1	
	R0715	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
	R0717	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
	R0718	ERJ3GEYJ111	M.RESISTOR CH 1/16W 110	1	
	R0719	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0720	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R0721	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R0722	ERJ3GEYJ301	M.RESISTOR CH 1/16W 300	1	
	R0723	ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	1	
	R0724	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
	R0725	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
	R0726	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0727	ERJ3GEYJ513	M.RESISTOR CH 1/16W 51K	1	
	R0729	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R0730	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R0731	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R0732	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R0733	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R0736	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R0737	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R0740	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R0741	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R1001	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1002	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1003	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R1004	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R1005	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
	R1006	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R1007	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1008	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1009	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1010	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1011	ERJ6GMYG823	M.RESISTOR CH 1/10W 82K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R1012	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
	R1013	ERJ6GMYG153	M.RESISTOR CH 1/10W 15K	1	
	R1014	ERJ6GMYG163	M.RESISTOR CH 1/10W 16K	1	
	R1015	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
	R1016	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
	R1017	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
	R1018	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R1019	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R1022	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1023	ERJ6GMYJ123	M.RESISTOR CH 1/10W 12K	1	
	R1024	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R1025	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1026	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R1027	ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
	R1201	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
	R1202	ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
	R1203	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R1204	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
	R2501	ERDS2TJ391	C.RESISTOR 1/4W 390	1	
	R2502	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R2503	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2504	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
	R2505	ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
	R2506	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R2507	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R2508	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2509	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2510	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2511	ERJ6GMYG433	M.RESISTOR CH 1/10W 43K	1	
	R2513	ERJ6GMYJ274	M.RESISTOR CH 1/10W 270	1	
	R2514	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R2515	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R2516	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R2517	ERDS1TJ1R2	C.RESISTOR 1/2W 1.2	1	
	R2518	ERDS1TJ1R5	C.RESISTOR 1/2W 1.5	1	
	R2519	ERDS2TJ330	C.RESISTOR 1/4W 33	1	
	R2532	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R3001	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
	R3002	ERJ6GMYG301	M.RESISTOR CH 1/10W 300	1	
	R3003	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R3004	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R3005	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R3006	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R3008	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
	R3009	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3010	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R3011	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3012	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R3020	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R3021	ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
	R3022	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R3023	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R3024	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R3025	ERJ6GMYG102	M.RESISTOR CH 1/10W 1K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R3026	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
	R3027	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R3028	ERJ6GMYG152	M.RESISTOR CH 1/10W 1.5K	1	
	R3029	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
	R3030	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
	R3031	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
	R3032	ERJ6GMYG331	M.RESISTOR CH 1/10W 330	1	
	R3033	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R3034	ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
	R3035	ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
	R3036	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R3040	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R3041	ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
	R3042	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R3043	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
	R4001	ERJ6GMYG334	M.RESISTOR CH 1/10W 330K	1	
	R4002	ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
	R4003	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4004	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
	R4005	ERJ6GMYG271	M.RESISTOR CH 1/10W 270	1	
	R4006	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4007	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R4008	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4009	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
	R4010	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
	R4011	ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
	R4012	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4014	ERJ6GMYJ225	M.RESISTOR CH 1/10W 2.2M	1	
	R4015	ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
	R4016	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
	R4020	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4021	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4022	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4023	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4024	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4025	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4026	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4027	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4028	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4029	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4030	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R4031	ERJ6GMYJ753	M.RESISTOR CH 1/10W 75K	1	
	R4036	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4037	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4038	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4039	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4040	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R4041	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R4042	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4043	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4044	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
	R4045	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4046	ERJ6RBD393	M.RESISTOR CH 1/10W 39K	1	[SUPPLIED FROM MBV]
	R4047	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R4048	ERJ6GMYJ823	M.RESISTOR CH 1/10W 82K	1	
	R4049	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4050	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4051	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4052	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4053	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4054	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4055	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1	
	R4056	ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
	R4057	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4058	ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
	R4060	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4061	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R4062	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R4063	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R4064	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4065	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R4066	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4067	ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
	R4068	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R4069	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4070	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R4071	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4072	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R4909	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R4910	ERJ6GMYJ911	M.RESISTOR CH 1/10W 910	1	
	R4911	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R4912	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R4913	ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
	R4915	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R4921	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4923	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4924	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4925	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4926	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4927	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4928	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4929	ERJ6GMYJ750	M.RESISTOR CH 1/10W 75	1	
	R4930	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4933	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4937	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R4938	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R4939	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4940	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R4941	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4943	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4944	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4945	ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
	R4946	ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
	R4947	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4949	ERJ6GMYJ121	M.RESISTOR CH 1/10W 120	1	
	R4950	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R4953	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
	R4955	ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R4956	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R4957	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R4961	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
	R4962	ERJ6GMYJ334	M.RESISTOR CH 1/10W 330K	1	
	R6001	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6003	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6005	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6006	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6007	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6008	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R6009	ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
	R6010	ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
	R6011	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6012	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6013	ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R6014	ERDS2TJ181	C.RESISTOR 1/4W 180	1	
	R6015	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6016	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6017	ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R6018	ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
	R6019	ERJ6GMYK106	M.RESISTOR CH 1/10W 10M	1	
	R6020	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6021	ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
	R6022	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6025	ERDS2TJ121	C.RESISTOR 1/4W 120	1	
	R6027	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6031	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6032	ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
	R6033	ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
	R6034	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R6035	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R6036	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6037	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6038	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R6040	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R6063	ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
	R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7305	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	R7306	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R7318	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7324	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7325	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
	R7326	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7327	ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
	R7328	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7329	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7501	ERDS2TJ5R6	C.RESISTOR 1/4W 5.6	1	
	R7502	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	1	
	R7503	ERJ6GMYJ202	M.RESISTOR CH 1/10W 2K	1	
	R7504	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
	R7505	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7506	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7507	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R7508	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7509	ERJ6GMYG822	M.RESISTOR CH 1/10W 8.2K	1	
	R7510	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
	R7511	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7512	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7514	ERJ6GMYG822	M.RESISTOR CH 1/10W 8.2K	1	
	R7515	ERJ6GMYG562	M.RESISTOR CH 1/10W 5.6K	1	
	R7516	ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
	R7517	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7520	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7521	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7523	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7524	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7525	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7527	ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
	R7528	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7529	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
	R7531	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7532	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7533	ERJ6GMYJ303	M.RESISTOR CH 1/10W 30K	1	
	R7534	ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
	R7535	ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
	R7536	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7555	ERJ6GMYG822	M.RESISTOR CH 1/10W 8.2K	1	
	R7556	ERJ6GMYG123	M.RESISTOR CH 1/10W 12K	1	
	R7601	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7602	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7603	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R7606	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7607	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	R7608	ERG2SJ331	M.RESISTOR 2W 330	1	
	R7609	ERG2SJ331	M.RESISTOR 2W 330	1	
	R7612	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R7613	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	R7614	ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
	R7615	ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
	R7616	ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
	R7617	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
	R7620	ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	1	
	R7621	ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
	R7622	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R7623	ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
	R7705	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R7707	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
	R7708	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7709	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7710	ERJ3GEYJ511	M.RESISTOR CH 1/16W 510	1	
	R7711	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7712	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7713	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7714	ERJ3GEYG153	M.RESISTOR CH 1/16W 15K	1	
	R7715	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
	R7716	ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
	R7717	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R7719	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7720	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
	R7721	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
	R7722	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
	R7723	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
	R7724	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7725	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7727	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7728	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7729	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
	R7730	ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
	R7731	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
	R7732	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
	R7733	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
	R7734	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7735	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7736	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
	R7737	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
	R7738	ERJ3GEYK225	M.RESISTOR CH 1/16W 2.2M	1	
	R7739	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
	R7740	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7741	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7742	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7743	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7744	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7746	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7747	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7748	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7749	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7750	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7751	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7752	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7753	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
	R7754	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7755	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7756	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7757	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7759	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
	R7760	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
	R7761	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7762	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7763	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7764	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7765	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7766	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7767	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7770	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7771	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7772	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7773	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7774	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7775	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7776	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7777	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	R7778	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7779	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7780	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7781	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7782	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7783	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7784	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7785	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
	R7792	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7793	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7794	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7795	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7796	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7797	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7798	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7799	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
	R7801	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
	R7802	ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
	R7803	ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
	S1501	VSS0520	MODE SELECT SWITCH	1	
	S7503	EVQ11L07B	SWITCH	1	
	S7504	EVQ11L07B	SWITCH	1	
	S7505	VES0834	S-TAB SWITCH	1	
	S7506	EVQ11L07B	SWITCH	1	
	S7507	EVQ11L07B	SWITCH	1	
	S7509	EVQ11L07B	SWITCH	1	
	S7510	EVQ11L07B	SWITCH	1	
	S7516	EVQ11L07B	SWITCH	1	
	S7517	EVQ11L07B	SWITCH	1	
	T0701	EQV5EC080A	TRANSFORMER	1	
	T4001	EQQ7QF025P	TRANSFORMER	1	
	T4002	EQQ7QF026P	TRANSFORMER	1	
⚠	TU7601	ENG47298G1	TUNER	1	[SUPPLIED FROM MBV]
	VR0701	EVNCBAA00B24	V.RESISTOR 20K	1	
	VR3012	EVNCYAA03B53	V.RESISTOR 5K	1	
	VR3013	EVNCYAA03B53	V.RESISTOR 5K	1	
	X0701	VLF1430	TRANSFORMER	1	[SUPPLIED FROM MBV]
	X0702	VLF1431	TRANSFORMER	1	[SUPPLIED FROM MBV]
	X0704	EFCT6R0KS4	FILTER	1	
	X0705	EFCS5R5MS5	FILTER	1	
	X0706	EFCS6R5MS5	CRYSTAL OSCILLATOR	1	
	X0707	VLF1288	SAW FILTER	1	
	X0710	EFCS3F02W3B	CRYSTAL OSCILLATOR	1	
	X3001	VSX0162	CRYSTAL OSCILLATOR	1	
	X6001	VSX0830	CRYSTAL OSCILLATOR	1	
	X6002	VSX0660	CRYSTAL OSCILLATOR	1	
	X7302	VSX0953	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
	X7701	VSX1043	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VXQ0648	FIP HOLDER	1	
		VMP5897	CONNECTING ANGLE	1	FOR TV DEMODULATOR C.B.A.
		VSC4753	SHIELD CASE (BOTTOM)	1	[SUPPLIED FROM MBV]
					FOR NICAM DECODER C.B.A.
		VSC4752	SHIELD CASE (MAIN)	1	[SUPPLIED FROM MBV]
					FOR NICAM DECODER C.B.A.
		VMP4894	SUPPORT ANGLE	1	FOR OSD C.B.A.
	■	VEP05377A	HEAD AMP C.B.A.		[SUPPLIED FROM MBV]
					(RTL)
	C501	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C502	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C503	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C504	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C505	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C507	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C509	ECUM1H681KBN	C.CAPACITOR CH 50V 680P	1	
	C510	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C511	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C512	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C513	ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
	C514	ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
	C515	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C516	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
	C517	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C518	ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
	C519	ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
	IC501	AN3369SB	IC	1	
	K501	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	L501	VLQ0599J680	COIL 68UH	1	
	L502	VLQ0599J680	COIL 68UH	1	
	LB501	VLP0145	COIL	1	
	LB502	VLP0145	COIL	1	
	LB503	VLP0145	COIL	1	
	LB504	VLP0145	COIL	1	
	P501	VJS3537B016G	CONNECTOR (FEMALE) 16P	1	
	P502	VJS3958	CONNECTOR (FEMALE) 11P	1	[SUPPLIED FROM MBV]
	R502	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	R503	ERJ6RED150	M.RESISTOR CH 1/10W 15	1	
	R504	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
	W705	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	W706	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
	W707	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
	W708	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

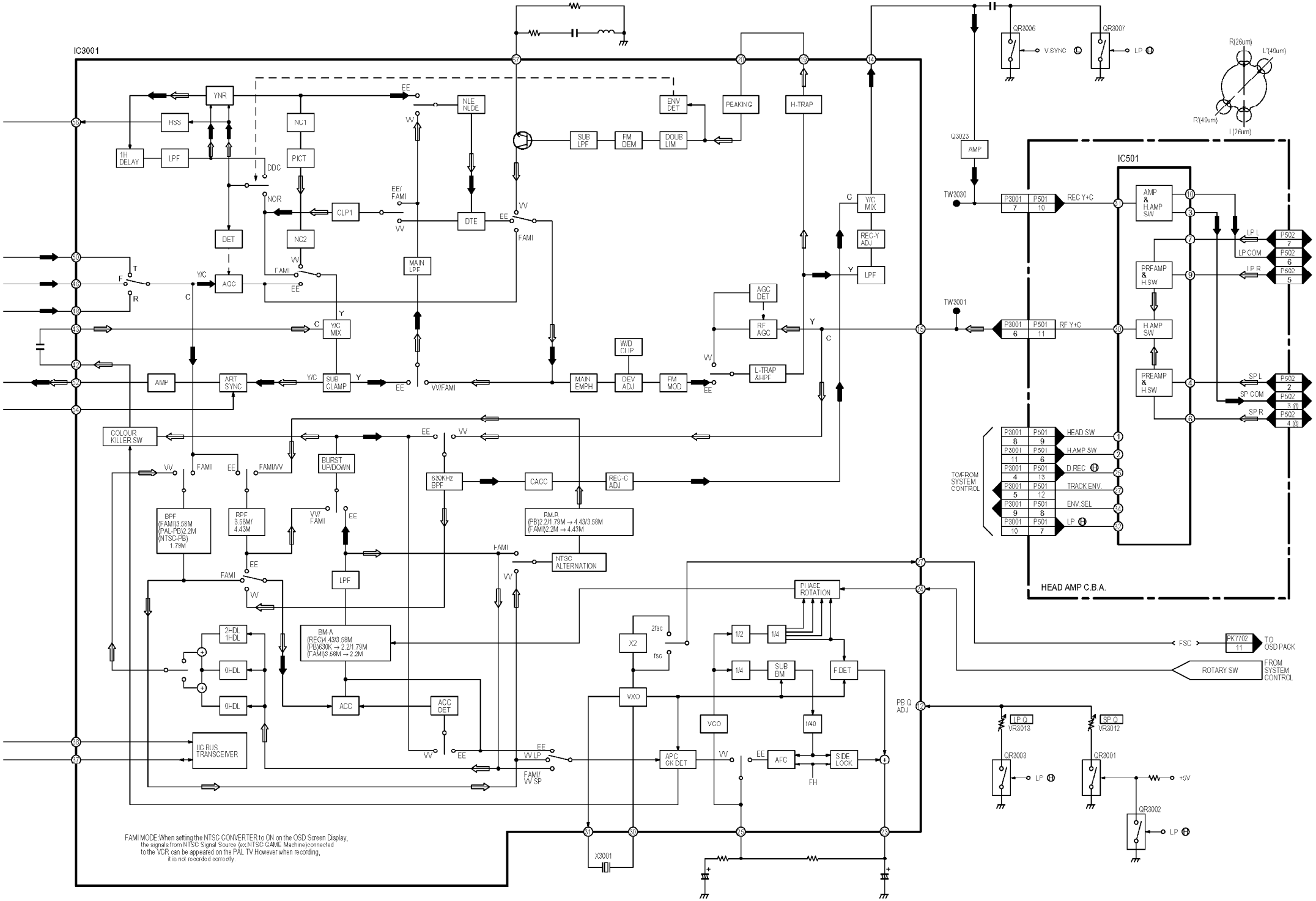
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VSC4563	SHIELD CASE (TOP)	1	
		VSC4792	SHIELD CASE (BOTTOM)	1	[SUPPLIED FROM MBV]
⚠	■	VEP01826S	POWER C.B.A.		[SUPPLIED FROM MBV]
					(RTL) NV-HD642EE/EE-K
⚠	C1101	VCK0286E102	CERAMIC CAPACITOR	1	
	C1102	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
⚠	C1103	VCK0286E102	CERAMIC CAPACITOR	1	
⚠	C1104	VCK0286E102	CERAMIC CAPACITOR	1	
	C1105	EEUFA1A122	E.CAPASITOR 10V 1200U	1	
	C1106	ECQE6104KF	P.CAPACITOR 630V 0.1U	1	
	C1108	ECCD3A470KGE	C.CAPACITOR 1KV 47P	1	
	C1109	ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
	C1110	ECEA0JGE331	E.CAPACITOR 6.3V 330U	1	
	C1111	ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
	C1112	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
	C1114	ECA1VGE470X	E.CAPACITOR 35V 47U	1	
	C1116	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1117	ECEA1AGE331	E.CAPACITOR 10V 330U	1	
⚠	C1118	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
⚠	C1119	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
	C1120	ECEC2GG330	E.CAPACITOR 400V 33U	1	
	C1131	EEUFA1E681	E.CAPASITOR 25V 680U	1	
	C1132	EEUFA1E331L	E.CAPASITOR 25V 330U	1	[SUPPLIED FROM MBV]
	C1133	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1134	EEUFA1A122	E.CAPASITOR 10V 1200U	1	
	C1135	EEUFA1A102B	E.CAPACITOR 10V 1000U	1	
	C1137	ECEA1JGE470	E.CAPACITOR 63V 47U	1	
	C1138	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
	C1139	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1140	ECEA1HGE101	E.CAPACITOR 50V 100U	1	
	C1141	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
	C1142	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1143	ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
	C1144	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
	C1145	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
	D1102	S1WBA60S	DIODE	1	
	D1103	AP01C	DIODE	1	
	D1104	MA185	DIODE	1	
	D1105	MA700	DIODE	1	
	D1106	MA4220-H	DIODE	1	
	D1107	1SS254	DIODE	1	
	D1109	ERA15-08	DIODE	1	
	D1110	ERA15-08	DIODE	1	
	D1113	RK36	DIODE	1	
	D1114	RK36	DIODE	1	
	D1118	RD100E	ZENER DIODE	1	
	D1121	RL2Z	DIODE	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
⚠	D1123	ERA22-04	DIODE	1	
⚠	D1124	ERA22-04	DIODE	1	
	D1125	11EQS04	DIODE	1	
	D1130	MA7300B	DIODE	1	
⚠	F1101	XBA2C16TH15	FUSE	1	
	IC1101	STRM6559LF	IC	1	
	IC1102	UPC1093J	IC	1	
⚠	IP1101	VSF0015A10	FUSE	1	
	L1101	VLQ0655K220	COIL 22UH	1	
⚠	L1107	ELF15N005A	LINE FILTER	1	
⚠	L1108	ELF17N004A	LINE FILTER	1	
	L1121	VLQ0655K220	COIL 22UH	1	
	L1122	VLQ0655K220	COIL 22UH	1	
	L1123	ELESE101KA	COIL 100UH	1	
	L1124	ELESE101KA	COIL 100UH	1	
	LB1105	VLP0074	COIL	1	
⚠	P1101	VJS3306	AC INLET	1	
	P1103	VJP3917A016G	CONNECTOR (MALE) 16P	1	
⚠	Q1111	CNX82A5387	PHOTO COUPLER	1	[SUPPLIED FROM MBV]
	R1101	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
	R1102	ERG1SJ393	M.RESISTOR 1W 39K	1	
	R1105	ERDS1TJ395	C.RESISTOR 1/2W 3.9M	1	
	R1106	ERDS1TJ475	C.RESISTOR 1/2W 4.7M	1	
	R1107	ERDS2FJ224	C.RESISTOR 1/4W 220K	1	
	R1108	ERDS2FJ101	C.RESISTOR 1/4W 100	1	
	R1109	ERDS2FJ152	C.RESISTOR 1/4W 1.5K	1	
	R1110	ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
	R1111	ERDS2FJ181	C.RESISTOR 1/4W 180	1	[SUPPLIED FROM MBV]
	R1112	ERDS2FJ331	C.RESISTOR 1/4W 330	1	
	R1113	ERX1SJ1R0	M.RESISTOR 1W 1	1	
	R1114	ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
	R1115	ERDS2FJ330	C.RESISTOR 1/4W 33	1	[SUPPLIED FROM MBV]
	R1116	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
	R1119	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1120	ER0S2CKG2701	M.RESISTOR 1/4W 2.7K	1	
	R1121	ER0S2CKG2701	M.RESISTOR 1/4W 2.7K	1	
	R1122	ERC12AGM334	S.RESISTOR 1/2W 330K	1	
	R1125	ERDS2TJ271	C.RESISTOR 1/4W 270	1	
	S7511	EVQ11L07B	SWITCH	1	
	S7512	EVQ11L07B	SWITCH	1	
	S7513	EVQ11L07B	SWITCH	1	
	S7514	EVQ11L07B	SWITCH	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
⚠	T1101	VLT0940	SWITCHING TRANSFORMER	1	[SUPPLIED FROM MBV]
			MISCELLANEOUS		
		VMP5133	INLET ANGLE	1	
		VHD0418	SCREW	1	
		TP00351-51	FUSE HOLDER	2	
⚠	■	VEP01826Q	POWER C.B.A.		[SUPPLIED FROM MBV]
					(RTL) NV-HD647EE
⚠	C1101	VCK0286E102	CERAMIC CAPACITOR	1	
	C1102	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
⚠	C1103	VCK0286E102	CERAMIC CAPACITOR	1	
⚠	C1104	VCK0286E102	CERAMIC CAPACITOR	1	
	C1105	EEUFA1A122	E.CAPASITOR 10V 1200U	1	
	C1106	ECQE6104KF	P.CAPACITOR 630V 0.1U	1	
	C1108	ECCD3A470KGE	C.CAPACITOR 1KV 47P	1	
	C1109	ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
	C1110	ECEA0JGE331	E.CAPACITOR 6.3V 330U	1	
	C1111	ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
	C1112	ECQB1H822JF	P.CAPACITOR 50V 8200P	1	
	C1114	ECA1VGE470X	E.CAPACITOR 35V 47U	1	
	C1116	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1117	ECEA1AGE331	E.CAPACITOR 10V 330U	1	
⚠	C1118	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
⚠	C1119	ECQU2A104MVA	P.CAPACITOR 250V 0.1U	1	
	C1120	ECEC2GG330	E.CAPACITOR 400V 33U	1	
	C1131	EEUFA1E681	E.CAPASITOR 25V 680U	1	
	C1132	EEUFA1E331L	E.CAPASITOR 25V 330U	1	[SUPPLIED FROM MBV]
	C1133	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1134	EEUFA1A122	E.CAPASITOR 10V 1200U	1	
	C1135	EEUFA1A102B	E.CAPACITOR 10V 1000U	1	
	C1137	ECEA1JGE470	E.CAPACITOR 63V 47U	1	
	C1138	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
	C1139	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1140	ECEA1HGE101	E.CAPACITOR 50V 100U	1	
	C1141	ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
	C1142	ECKD2H101KB	C.CAPACITOR 500V 100P	1	
	C1143	ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
	C1144	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
	C1145	ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
	D1102	S1WBA60S	DIODE	1	
	D1103	AP01C	DIODE	1	
	D1104	MA185	DIODE	1	
	D1105	MA700	DIODE	1	
	D1106	MA4220-H	DIODE	1	
	D1107	1SS254	DIODE	1	
	D1109	ERA15-08	DIODE	1	
	D1110	ERA15-08	DIODE	1	

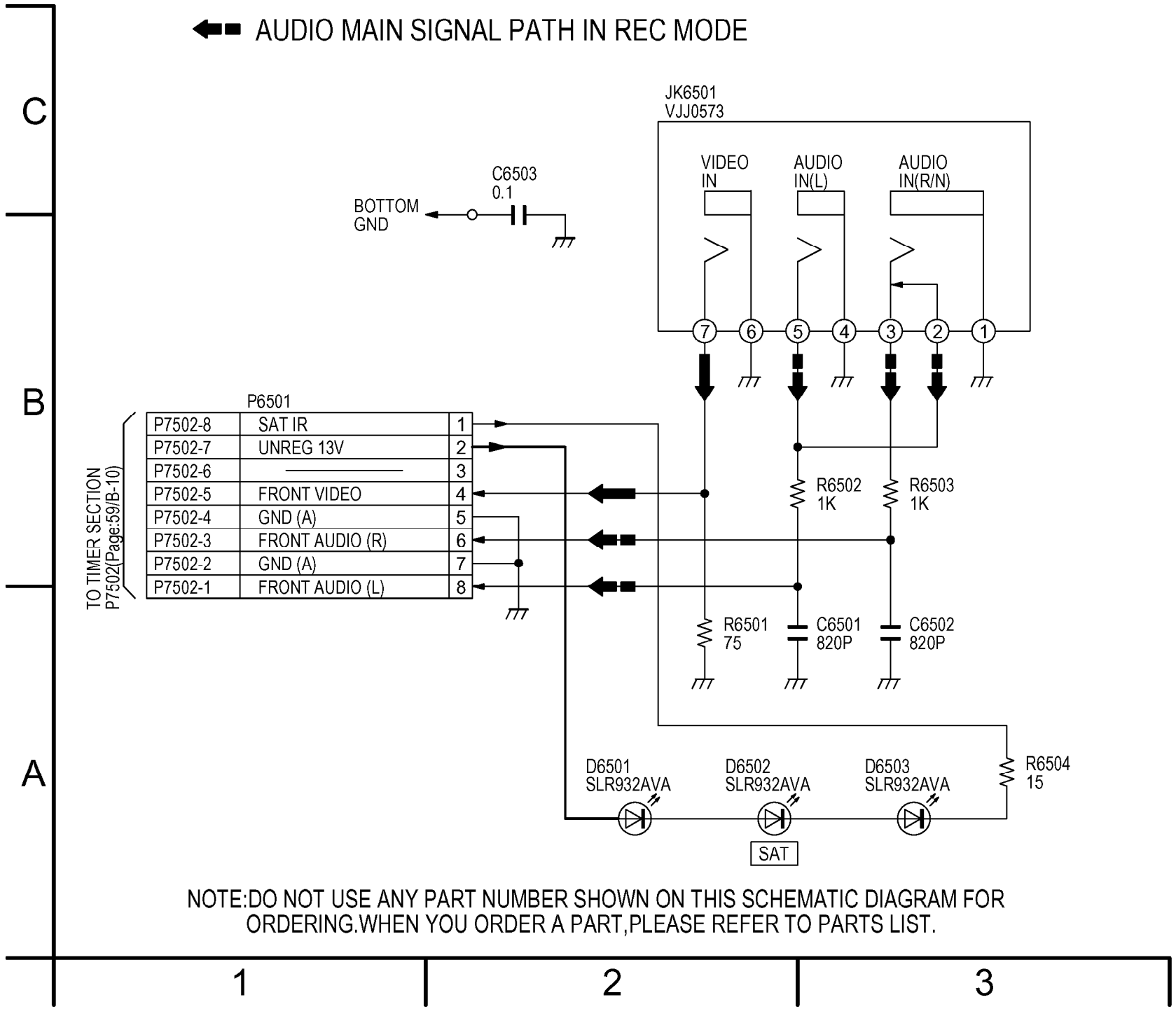
	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	D1113	RK36	DIODE	1	
	D1114	RK36	DIODE	1	
	D1118	RD100E	ZENER DIODE	1	
	D1121	RL2Z	DIODE	1	
⚠	D1123	ERA22-04	DIODE	1	
⚠	D1124	ERA22-04	DIODE	1	
	D1125	11EQS04	DIODE	1	
	D1130	MA7300B	DIODE	1	
⚠	F1101	XBA2C16TH15	FUSE	1	
	IC1101	STRM6559LF	IC	1	
	IC1102	UPC1093J	IC	1	
⚠	IP1101	VSF0015A10	FUSE	1	
	L1101	VLQ0655K220	COIL 22UH	1	
⚠	L1107	ELF15N005A	LINE FILTER	1	
⚠	L1108	ELF17N004A	LINE FILTER	1	
	L1121	VLQ0655K220	COIL 22UH	1	
	L1122	VLQ0655K220	COIL 22UH	1	
	L1123	ELESE101KA	COIL 100UH	1	
	L1124	ELESE101KA	COIL 100UH	1	
	LB1105	VLP0074	COIL	1	
⚠	P1101	VJS3306	AC INLET	1	
	P1103	VJP3917A016G	CONNECTOR (MALE) 16P	1	
⚠	Q1111	CNX82A5387	PHOTO COUPLER	1	[SUPPLIED FROM MBV]
	R1101	ERDS2TJ561	C.RESISTOR 1/4W 560	1	
	R1102	ERG1SJ393	M.RESISTOR 1W 39K	1	
	R1105	ERDS1TJ395	C.RESISTOR 1/2W 3.9M	1	
	R1106	ERDS1TJ475	C.RESISTOR 1/2W 4.7M	1	
	R1107	ERDS2FJ224	C.RESISTOR 1/4W 220K	1	
	R1108	ERDS2FJ101	C.RESISTOR 1/4W 100	1	
	R1109	ERDS2FJ152	C.RESISTOR 1/4W 1.5K	1	
	R1110	ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
	R1111	ERDS2FJ181	C.RESISTOR 1/4W 180	1	[SUPPLIED FROM MBV]
	R1112	ERDS2FJ331	C.RESISTOR 1/4W 330	1	
	R1113	ERX1SJ1R0	M.RESISTOR 1W 1	1	
	R1114	ERDS2FJ332	C.RESISTOR 1/4W 3.3K	1	
	R1115	ERDS2FJ330	C.RESISTOR 1/4W 33	1	[SUPPLIED FROM MBV]
	R1116	ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
	R1119	ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
	R1120	ER0S2CKG2701	M.RESISTOR 1/4W 2.7K	1	
	R1121	ER0S2CKG2701	M.RESISTOR 1/4W 2.7K	1	
	R1122	ERC12AGM334	S.RESISTOR 1/2W 330K	1	
	R1125	ERDS2TJ271	C.RESISTOR 1/4W 270	1	

	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	S7511	EVQ11L07B	SWITCH	1	
	S7512	EVQ11L07B	SWITCH	1	
	S7513	EVQ11L07B	SWITCH	1	
	S7514	EVQ11L07B	SWITCH	1	
	S7515	EVQ11L07B	SWITCH	1	
⚠	T1101	VLT0940	SWITCHING TRANSFORMER	1	[SUPPLIED FROM MBV]
			MISCELLANEOUS		
		VMP5133	INLET ANGLE	1	
		VHD0418	SCREW	1	
		TP00351-51	FUSE HOLDER	2	
	■	VEP07992A	AV FRONT C.B.A.		[SUPPLIED FROM MBV]
					(RTL) NV-HD647EE
	C6501	ECKF1H821KB	C.CAPACITOR 50V 820P	1	
	C6502	ECKF1H821KB	C.CAPACITOR 50V 820P	1	
	C6503	ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
	D6501	SLR932AVA	DIODE	1	[SUPPLIED FROM MBV]
	D6502	SLR932AVA	DIODE	1	[SUPPLIED FROM MBV]
	D6503	SLR932AVA	DIODE	1	[SUPPLIED FROM MBV]
	JK6501	VJJ0573	3-PIN AV JACK	1	
	P6501	VJS3537A008G	CONNECTOR (FEMALE) 8P	1	
	R6501	ERDS2TJ750	C.RESISTOR 1/4W 75	1	
	R6502	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
	R6503	ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
	R6504	ERDS2TJ150	C.RESISTOR 1/4W 15	1	
			MISCELLANEOUS		
		VMD0504	LED HOLDER	2	
		VMD2591	LED HOLDER	1	[SUPPLIED FROM MBV]
	■	----------	CYLINDER STATOR C.B.A.		
			MISCELLANEOUS		
		HW-300A-CF	HALL IC	1	
		VJS3537B009G	CONNECTOR (FEMALE) 9P	1	

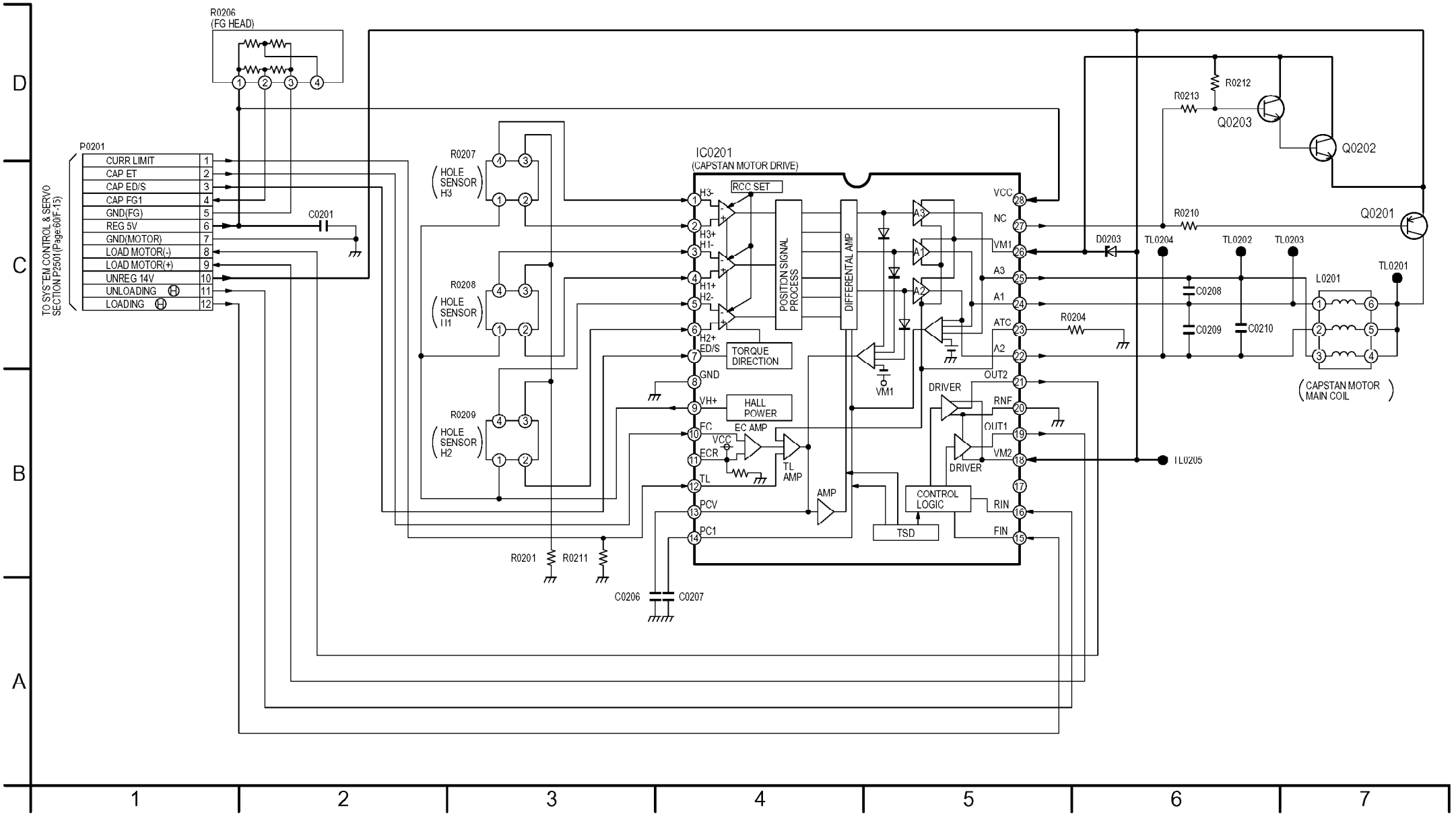

IC3001
YNR
HSS
1H DELAY
LPF
NC1
PICT
DDC
NOR
CLP1
DET
NC2
AGC
EE/ FAMI
DTE
MAIN LPF
NLE NLDE
SUB LPF
FM DEM
DOUB LIM
ENV DET
PEAKING
H-TRAP
Y/C MIX
REC-Y ADJ
LPF
AGC DET
RF AGC
L-TRAP &HPF
W/D CLIP
DEV ADJ
FM MOD
MAIN EMPH
AMP
ART SYNC
SUB CLAMP
COLOUR KILLER SW
BURST UP/DOWN
630KHz BPF
CACC
REC-C ADJ
BPF (FAMI)3.58M (PAL-PB)2.2M (NTSC-PB) 1.79M
BPF 3.58M/ 4.43M
BM-R (PB)2.2/1.79M → 4.43/3.58M (FAMI)2.2M → 4.43M
NTSC ALTERNATION
BM-A (REC)4.43/3.58M (PB)630K → 2.2/1.79M (FAMI)3.58M → 2.2M
2HDL 1HDL
0HDL
0HDL
ACC
ACC DET
IIC BUS TRANSCEIVER
PHASE ROTATION
X2
2fsc
fsc
1/2
1/4
1/4
SUB BM
F.DET
VXO
VCO
1/40
APC CK DET
AFC
SIDE LOCK
FH
PB Q ADJ
X3001
QR3006
V.SYNC
QR3007
LP
R(26um)
L'(40um)
R'(49um)
l (?4m)
Q3023
AMP
TW3030
TW3001
IC501
P3001 7
P501 10
REC Y+C
P3001 6
P501 11
RF Y+C
AMP & H.AMP SW
PRE.AMP & H.SW
H.AMP SW
PREAMP & H.SW
LP L
LP COM
LP R
SP L
SP COM
SP R
P502 7
P502 6
P502 5
P502 2
P502 3 (@)
P502 4 (@)
P3001 P501 8 9 HEAD SW
P3001 P501 11 6 H.AMP SW
P3001 P501 4 13 D.REC
P3001 P501 5 12 TRACK ENV
P3001 P501 9 8 ENV SEL
P3001 P501 10 7 LP
TO/FROM SYSTEM CONTROL
HEAD AMP C.B.A.
FSC
PK7702 11
TO OSD PACK
ROTARY SW
FROM SYSTEM CONTROL
LP Q VR3013
SP Q VR3012
QR3003
QR3001
QR3002
+5V
FAMI MODE:When setting the NTSC CONVERTER to ON on the OSD Screen Display, the signals from NTSC Signal Source (ex.NTSC GAME Machine)connected to the VCR can be appeared on the PAL TV.However when recording, it is not recorded correctly.

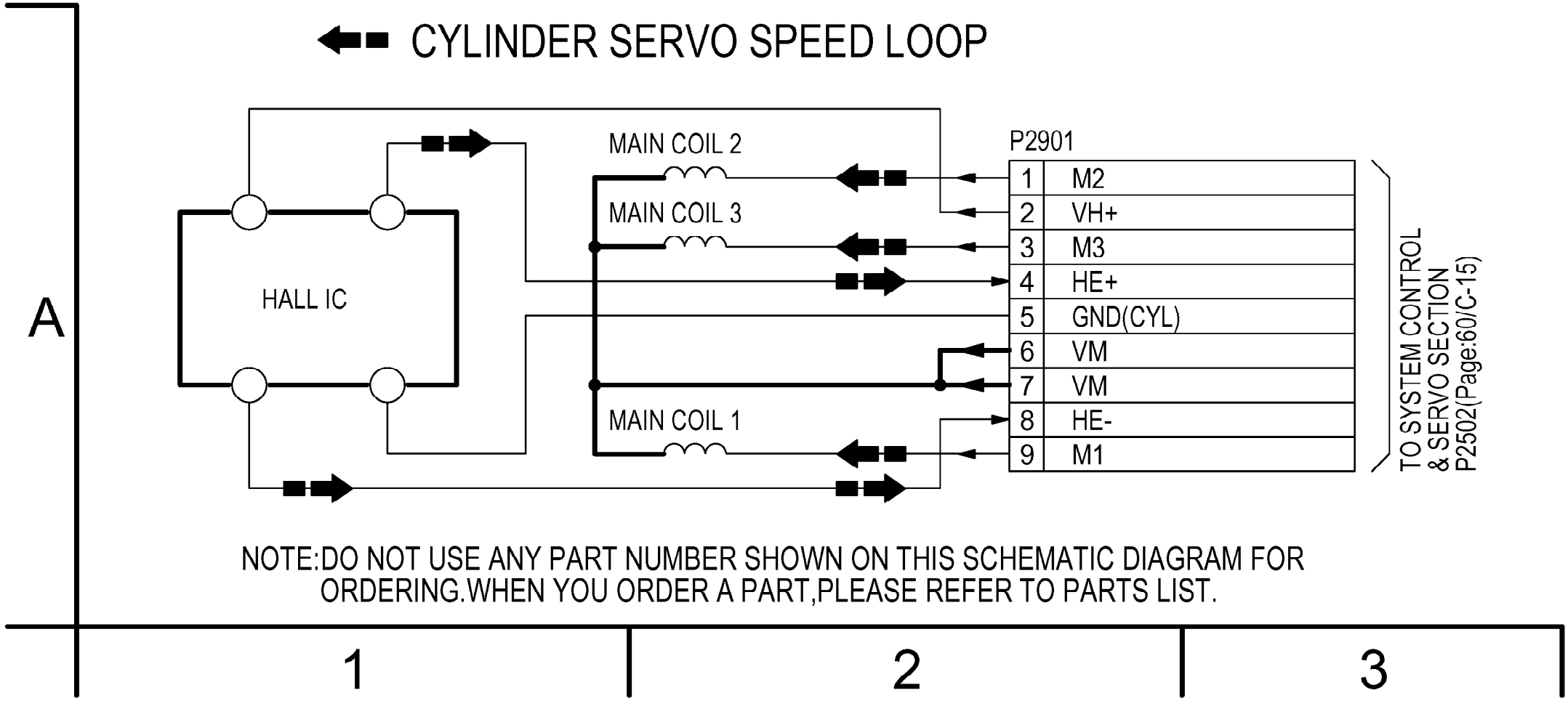
VIDEO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

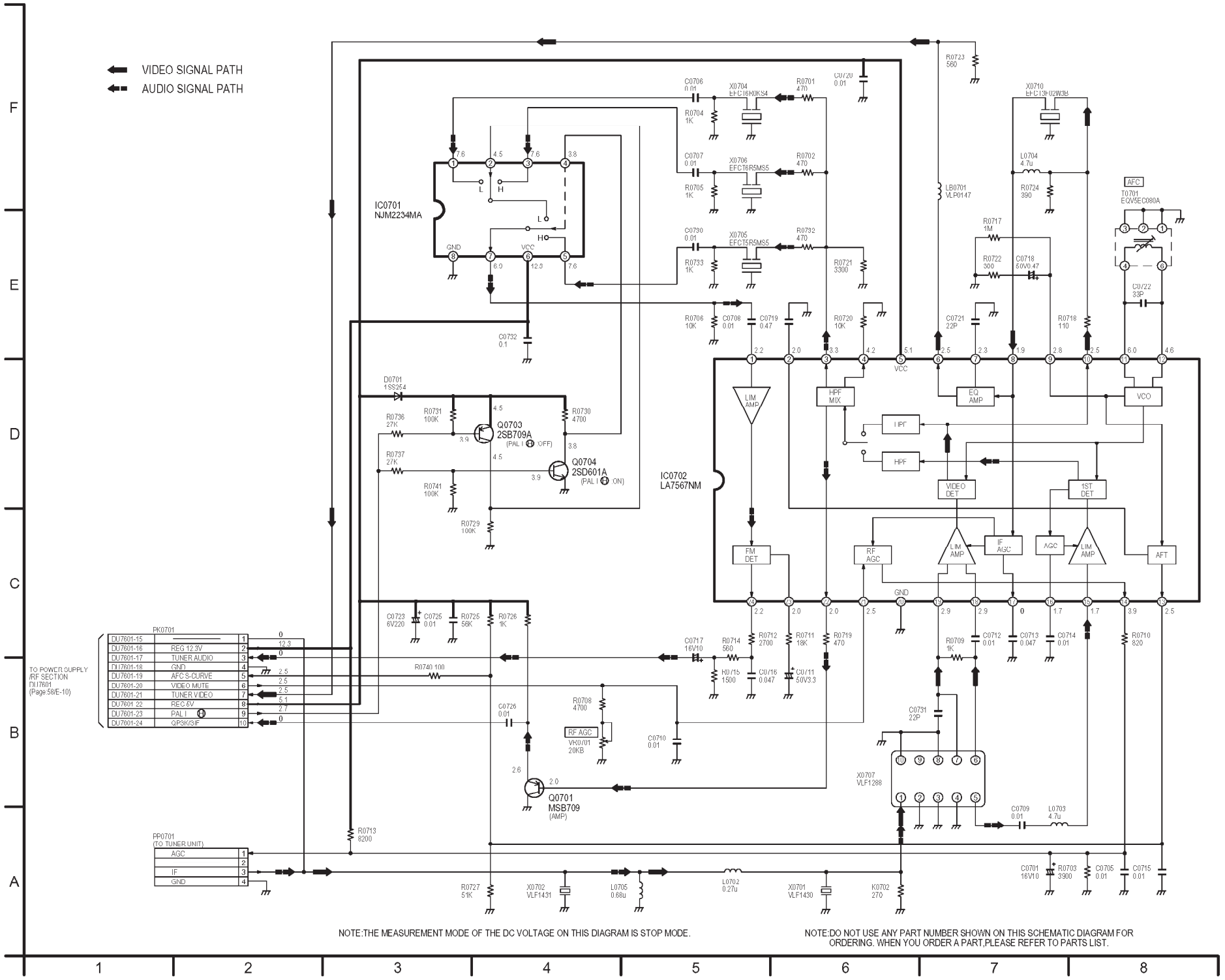


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

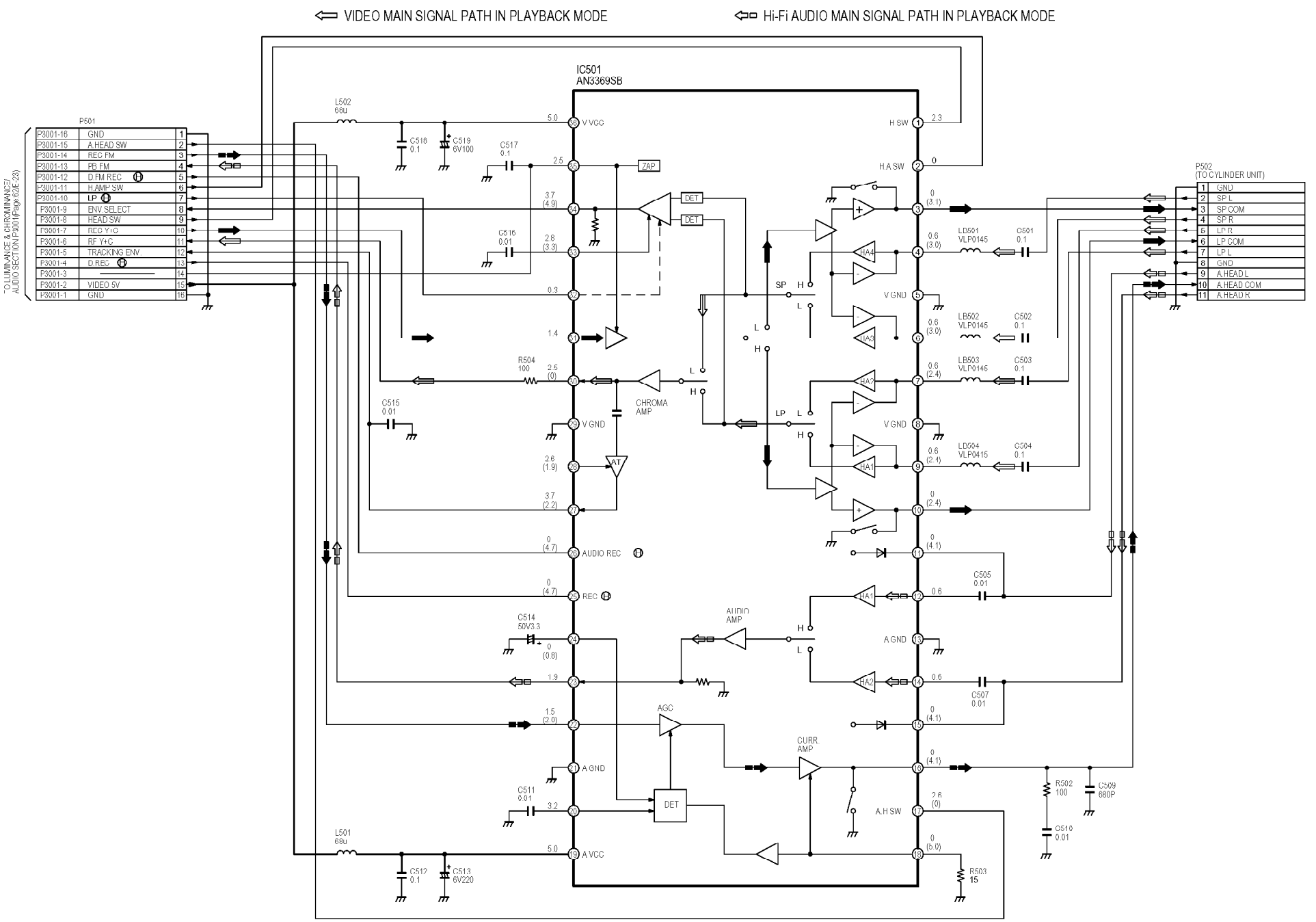

R0206
(FG HEAD)
P0201
CURR LIMIT 1
CAP ET 2
CAP ED/S 3
CAP FG1 4
GND(FG) 5
REG 5V 6
GND(MOTOR) 7
LOAD MOTOR(-) 8
LOAD MOTOR(+) 9
UNREG 14V 10
UNLOADING Ⓗ 11
LOADING Ⓗ 12
TO SYSTEM CONTROL & SERVO
SECTION P2501(Page:60/F-15)
C0201
R0207
HOLE SENSOR H3
R0208
HOLE SENSOR I1
R0209
HOLE SENSOR H2
IC0201
(CAPSTAN MOTOR DRIVE)
RCC SET
POSITION SIGNAL PROCESS
DIFFERENTIAL AMP
TORQUE DIRECTION
HALL POWER
EC AMP
TL AMP
AMP
CONTROL LOGIC
TSD
DRIVER
H3-
H3+
H1-
H1+
H2-
H2+
ED/S
GND
VH+
FC
VCC
ECR
TL
PCV
PC1
VCC
NC
VM1
A3
A1
ATC
A2
OUT2
RNF
OUT1
VM2
RIN
FIN
R0201
R0211
C0206
C0207
R0212
R0213
Q0203
Q0202
Q0201
R0210
D0203
TL0204
TL0202
TL0203
TL0201
L0201
C0208
C0209
C0210
R0204
TL0205
CAPSTAN MOTOR
MAIN COIL



NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

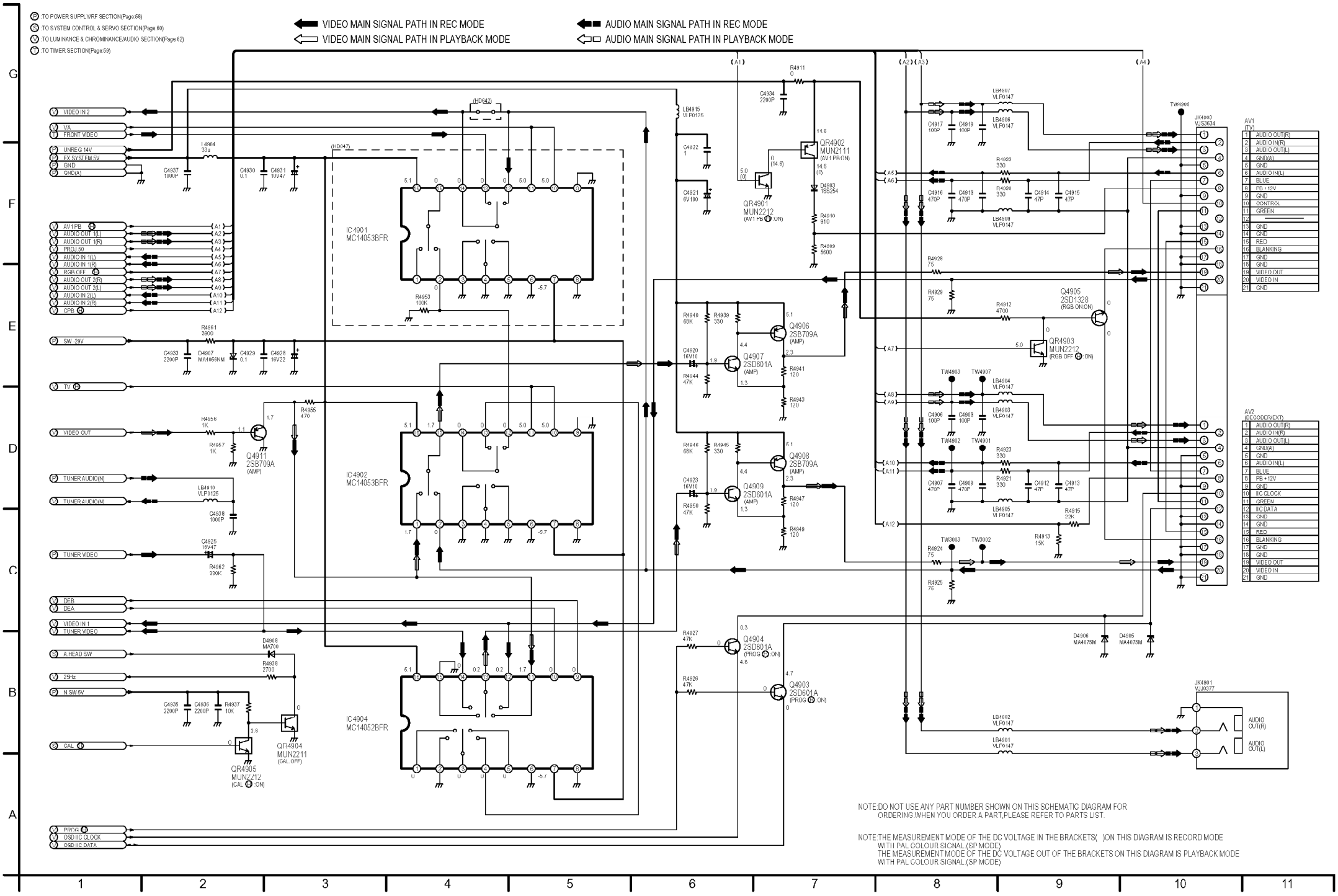

VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
IC0701
NJM2234MA
IC0702
LA7567NM
Q0703
2SB709A
(PAL I ON/OFF)
Q0704
2SD601A
(PAL I ON)
Q0701
MSB709
(AMP)
D0701
1SS254
X0704
EFC16R0KS4
X0706
EFCT6R5MS5
X0705
EFCT5R5MS5
X0710
EFC13H02W3B
X0707
VLF1288
X0702
VLF1431
X0701
VLF1430
T0701
EQV5EC080A
LB0701
VLP0147
L0704
4.7u
L0705
0.68u
L0702
0.27u
L0703
4.7u
RF AGC
VR0701
20KB
LIM AMP
HPF MIX
EQ AMP
VCO
LIPF
HPF
VIDEO DET
1ST DET
FM DET
RF AGC
IF AGC
AGC
AFT
VCC
GND
PK0701
DU7601-15
DU7601-16
REG 12.3V
DU7601-17
TUNER AUDIO
DU7601-18
GND
DU7601-19
AFC S-CURVE
DU7601-20
VIDEO MUTE
DU7601-21
TUNER VIDEO
DU7601-22
REC 5V
DU7601-23
PAL I
DU7601-24
QP3K/3IF
TO POWER SUPPLY /RF SECTION DU7601 (Page.58/E-10)
PP0701
(TO TUNER UNIT)
AGC
IF
GND
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

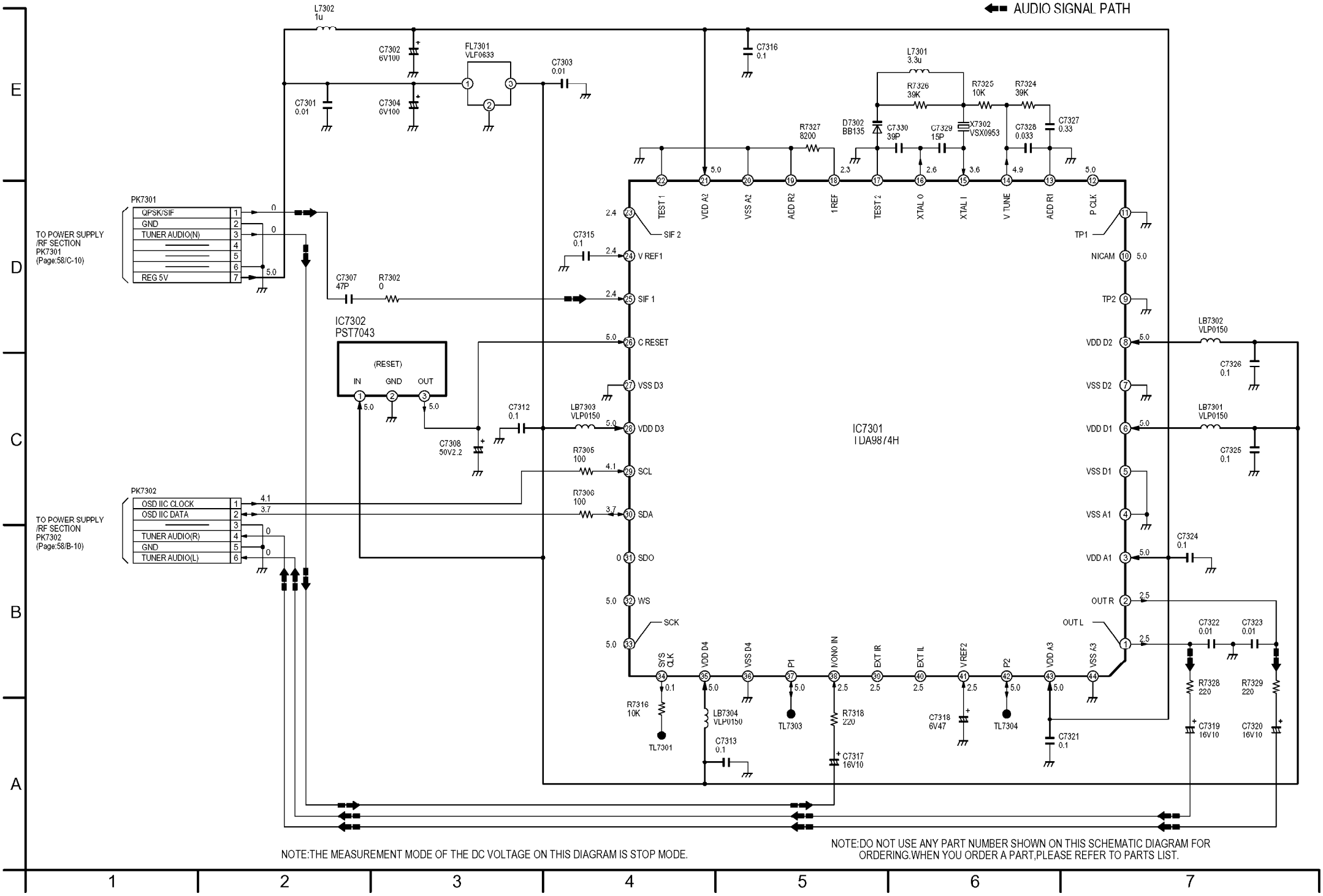
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

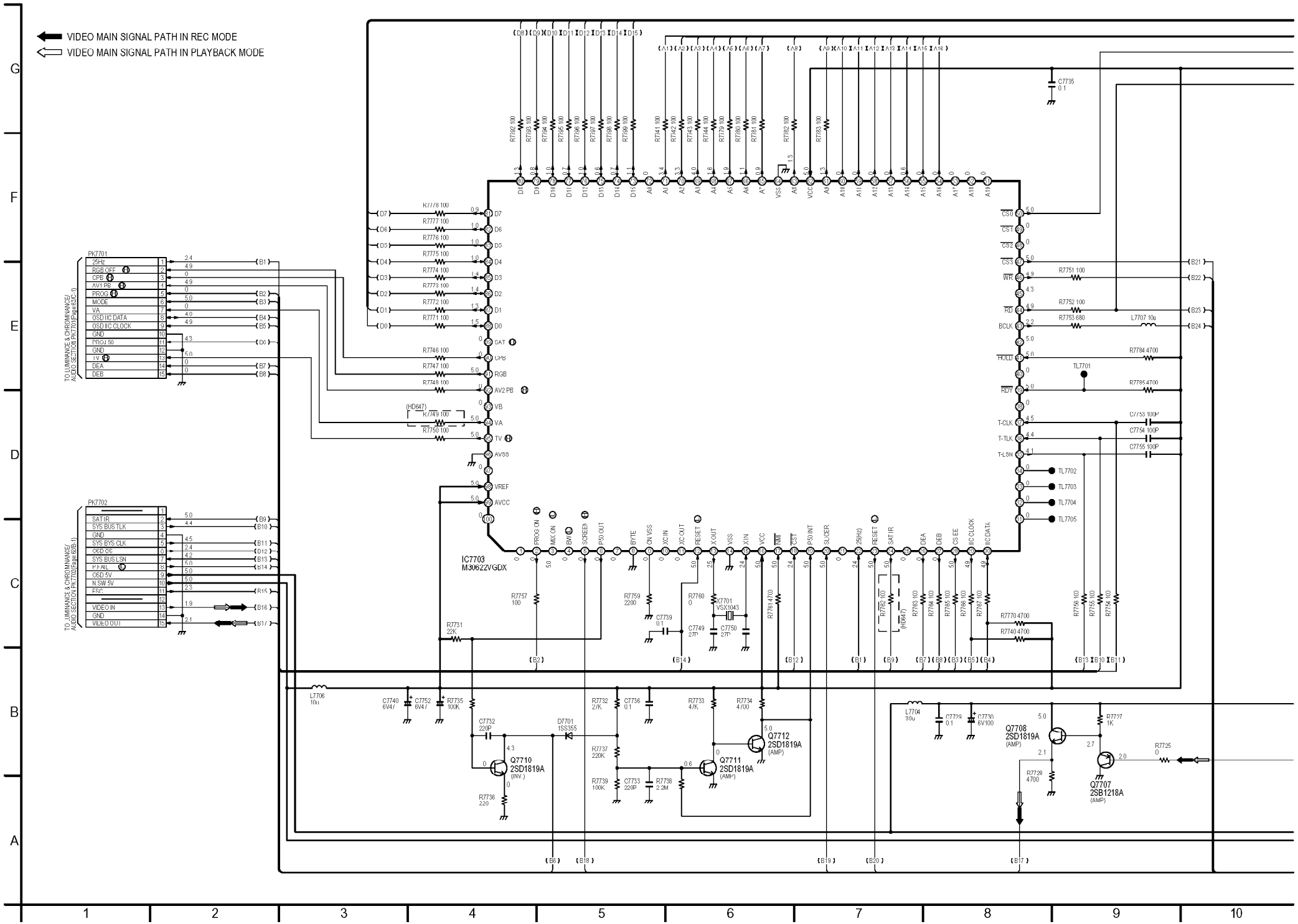
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

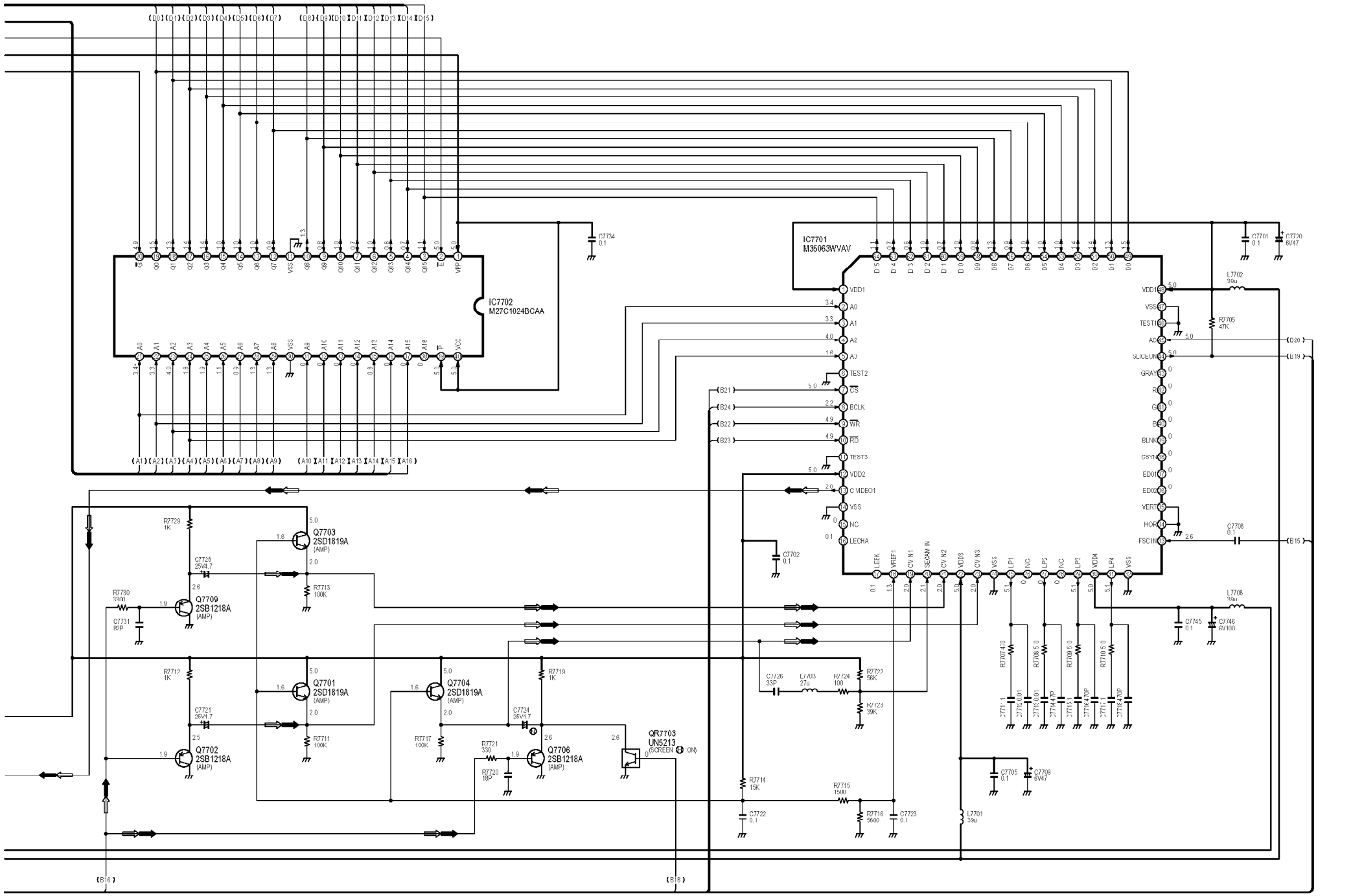

(P) :TO POWER SUPPLY/RF SECTION(Page:58)
(S) :TO SYSTEM CONTROL & SERVO SECTION(Page:60)
(V) :TO LUMINANCE & CHROMINANCE/AUDIO SECTION(Page:62)
(T) :TO TIMER SECTION(Page:59)
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
IC4901 MC14053BFR
IC4902 MC14053BFR
IC4904 MC14052BFR
Q4905 2SD1328 (RGB ON:ON)
QR4903 MUN2212 (RGB OFF:ON)
Q4906 2SB709A (AMP)
Q4907 2SD601A (AMP)
Q4908 2SB709A (AMP)
Q4909 2SD601A (AMP)
Q4911 2SB709A (AMP)
QR4902 MUN2111 (AV1 PB:ON)
QR4901 MUN2212 (AV1 PB:ON)
Q4904 2SD601A (PROG:ON)
Q4903 2SD601A (PROG:ON)
QR4904 MUN2211 (CAL:OFF)
QR4905 MUN2212 (CAL:ON)
JK4900 VJ33634
JK4901 VJJ0377
AV1 (TV)
AV2 (DCOODCTV/EXT)
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE)



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

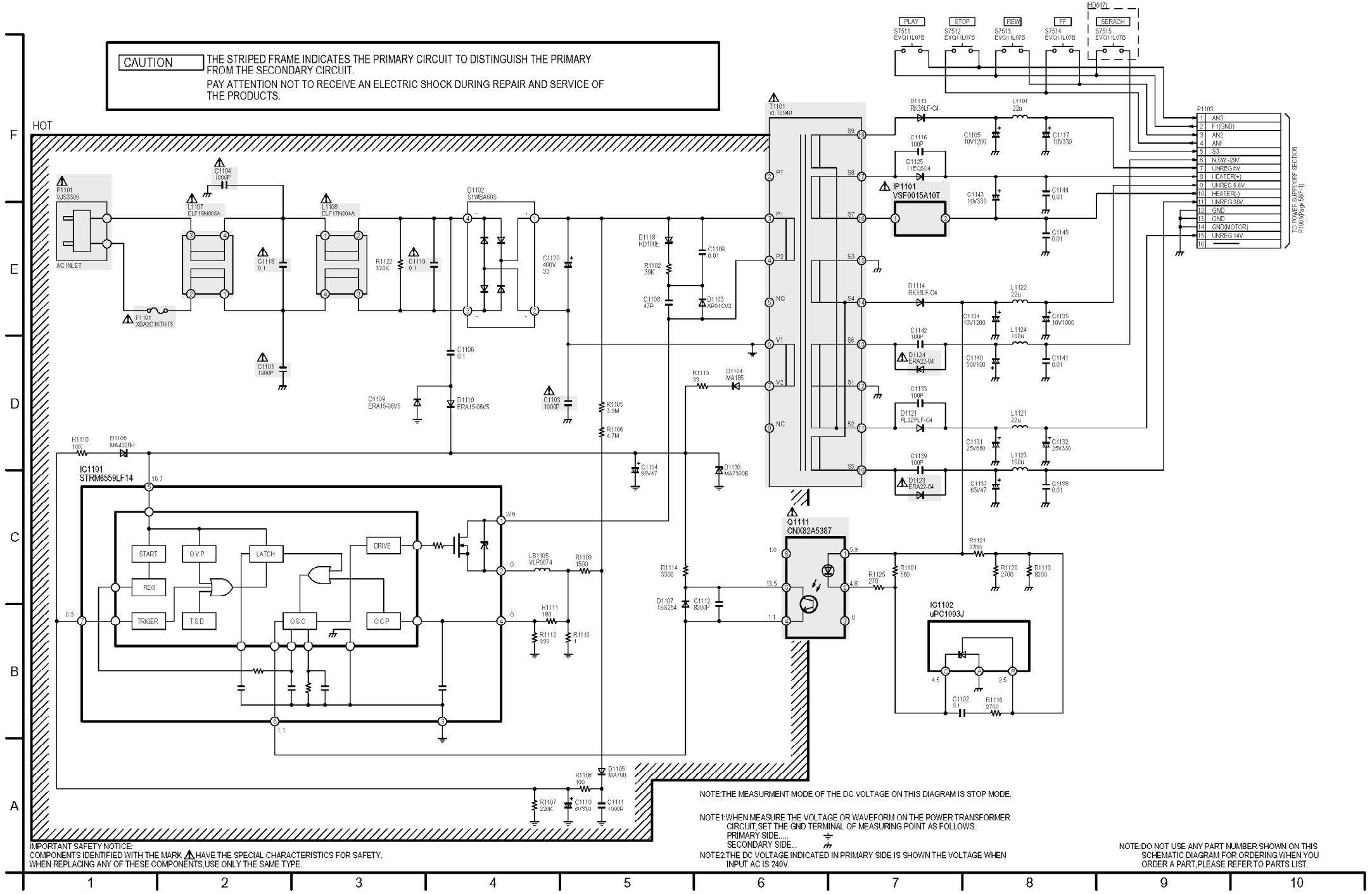
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

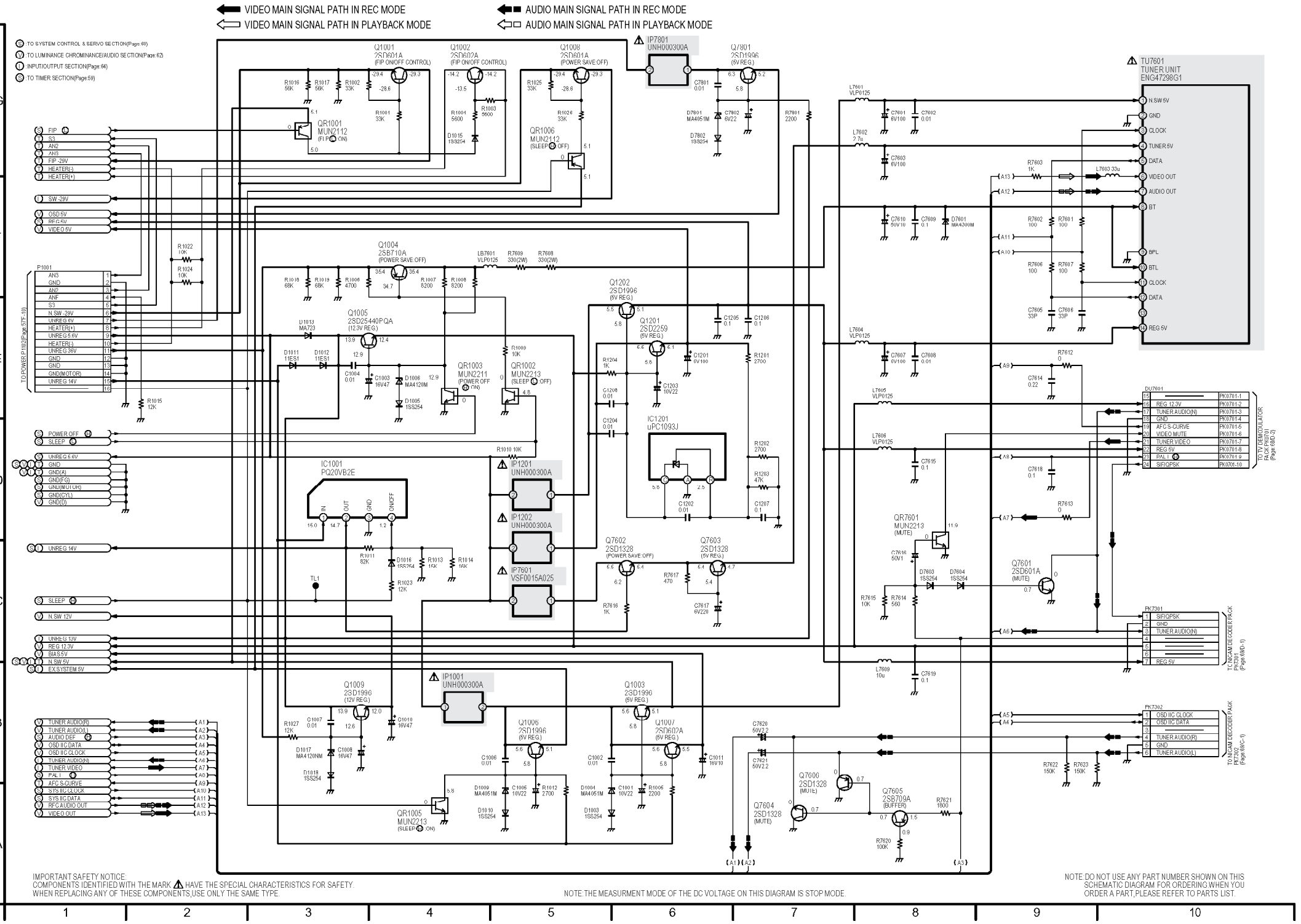

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
IC7703
M3062ZVGDX
Q7710
2SD1819A
(INV.)
Q7711
2SD1819A
(AMP)
Q7712
2SD1819A
(AMP)
Q7708
2SD1819A
(AMP)
Q7707
2SB1218A
(AMP)
X7701
VSX1043
D7701
1SS355
PK7701
PK7702
TO LUMINANCE & CHROMINANCE/ AUDIO SECTION PK7701(Page 63C-1)
TO LUMINANCE & CHROMINANCE/ AUDIO SECTION PK7702(Page 63B-1)
TL7701
TL7702
TL7703
TL7704
TL7705
L7706 10u
L7707 10u
L7704 30u
C7735 0.1
R7731 22K
R7757 100
R7759 2200
C7739 0.1
C7749 27P
C7750 27P
R7760 0
R7784 4700
R7770 4700
R7740 4700
R7751 100
R7752 100
R7753 680
R7754 100
C7753 100P
C7754 100P
C7755 100P
R7732 2.7K
R7733 4.7K
R7734 4700
R7736 220
R7737 220K
R7739 100K
C7732 220P
C7733 220P
R7738 2.2M
C7736 0.1
C7740 6V4.7
C7752 6V4.7
R7735 100K
C7799 0.1
C7730 6V100
R7797 1K
R7728 4700
R7725 0



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

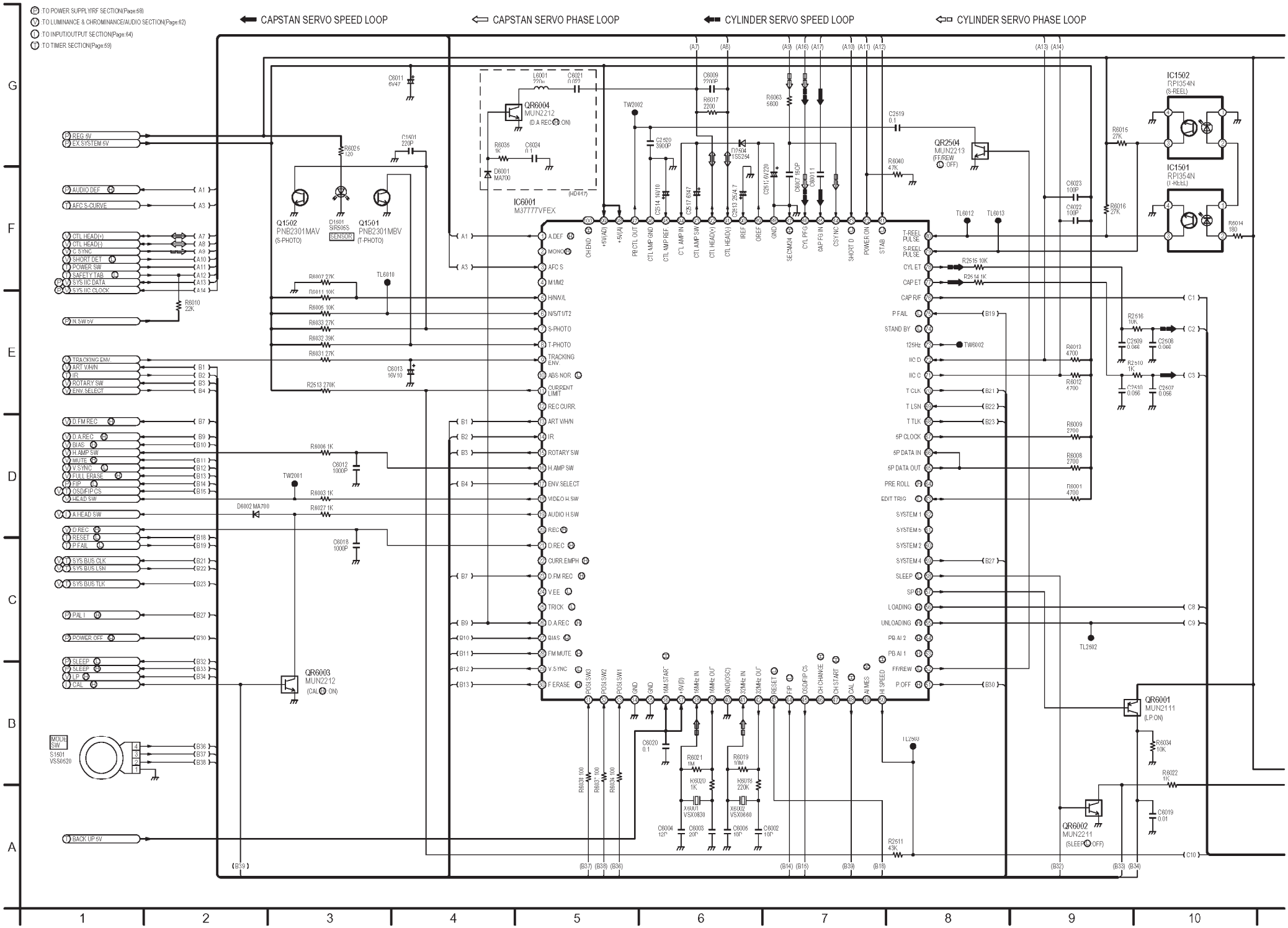

CAUTION
THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.
HOT
AC INLET
P1101 VJS3306
F1101 XBA2C16TH15
L1107 ELF15N005A
L1108 ELF17N004A
C1104 1000P
C1118 0.1
C1119 0.1
C1101 1000P
R1122 330K
D1102 S1WBA60S
C1120 400V 33
C1106 0.1
D1109 ERA15-08V5
D1110 ERA15-08V5
C1103 1000P
D1118 KU100E
R1102 39K
C1108 47P
C1109 0.01
D1103 AP01CV2
R1115 33
D1104 MA185
R1105 3.9M
R1106 4.7M
C1114 35V47
D1130 MA730GB
T1101 VLI1094U
PT
P1
P2
NC
V1
V2
NC
S9
S8
S7
S3
S4
S6
S1
S2
S5
IP1101 VSF0015A10T
D1113 RK36LF-C4
D1125 11EQS04
D1114 RK36LF-C4
D1124 ERA22-04
D1121 RL22PLF-C4
D1123 ERA22-04
C1116 100P
C1105 10V1200
L1101 22u
C1117 10V330
C1143 10V330
C1144 0.01
C1145 0.01
C1134 10V1200
L1122 22u
C1135 10V1000
L1124 100u
C1142 1UUP
C1140 50V100
C1141 0.01
C1133 100P
C1131 25V680
L1121 22u
C1132 25V330
L1123 100u
C1139 100P
C1137 63V47
C1138 0.01
(HD647)
PLAY S7511 EVQTIL07B
STOP S7512 EVQTIL07B
REW S7513 EVQTIL07B
FF S7514 EVQTIL07B
SERACH S7515 EVQTIL07B
P1103
1 AN3
2 F1(GND)
3 AN2
4 ANF
5 S3
6 N.SW -29V
7 UNREG 6V
8 HEATER(+)
9 UNREG 6.6V
10 HEATER(-)
11 UNREG 36V
12 GND
13 GND
14 GND(MOTOR)
15 UNREG 14V
16
TO POWER SUPPLY/VFF SECTION P1001(Page 59F-1)
H1110 10K
D1106 MA4220H
IC1101 STRM6559LF14
START
O.V.P
LATCH
DRIVE
REG
TRIGER
T.S.D
O.S.C
O.C.P
LB1105 VLP0074
R1109 1500
H1111 180
R1112 230
R1113 1
H1108 100
D1105 MA700
R1107 220K
C1110 6V330
C1111 1000P
Q1111 CNX82A5387
R1114 3300
D1107 1SS254
C1112 8200P
R1125 270
R1101 560
R1121 2700
R1120 2700
R1119 8200
IC1102 uPC1093J
C1102 n1
R1116 2700
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.
NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE.....
SECONDARY SIDE...
NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

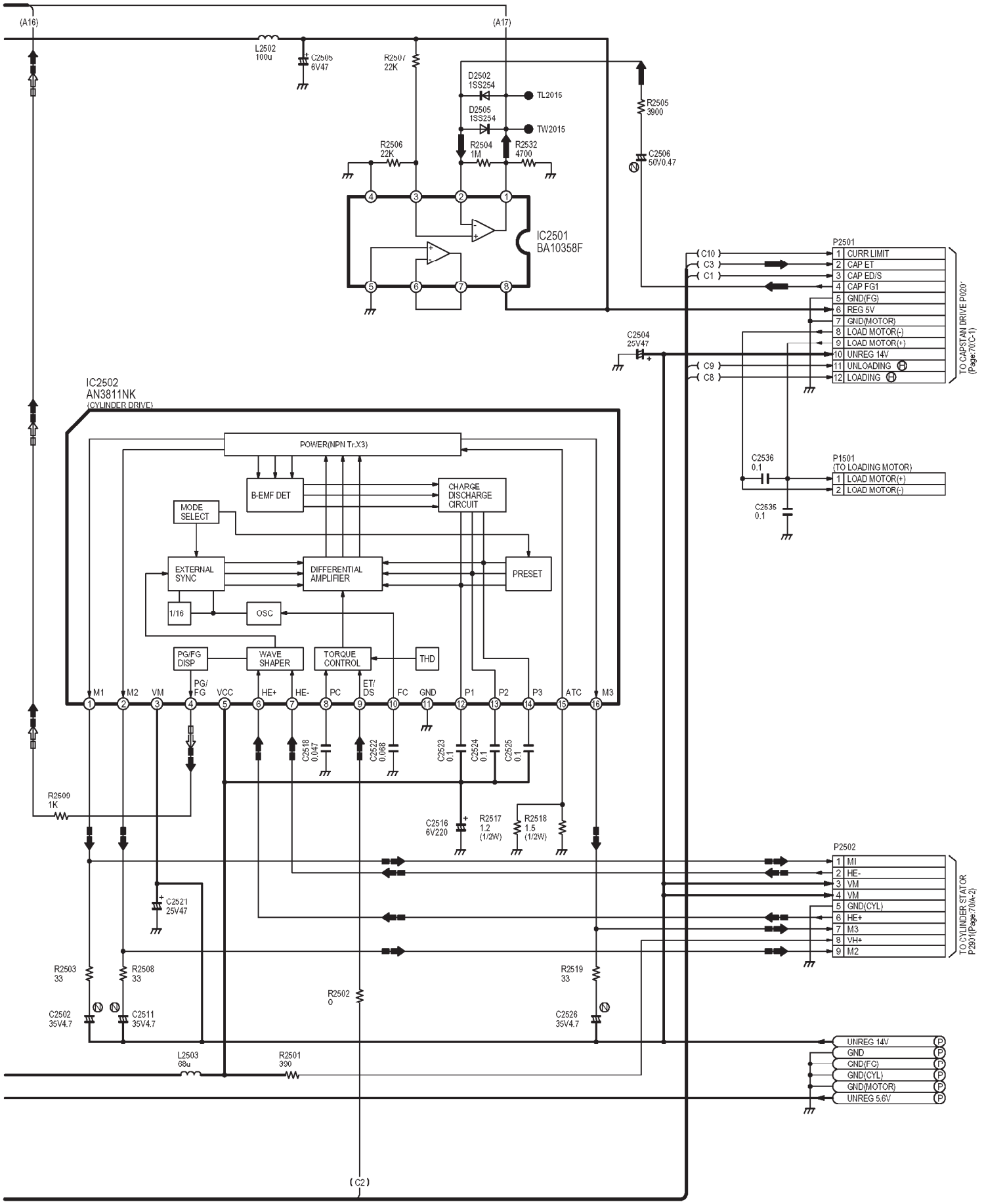


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

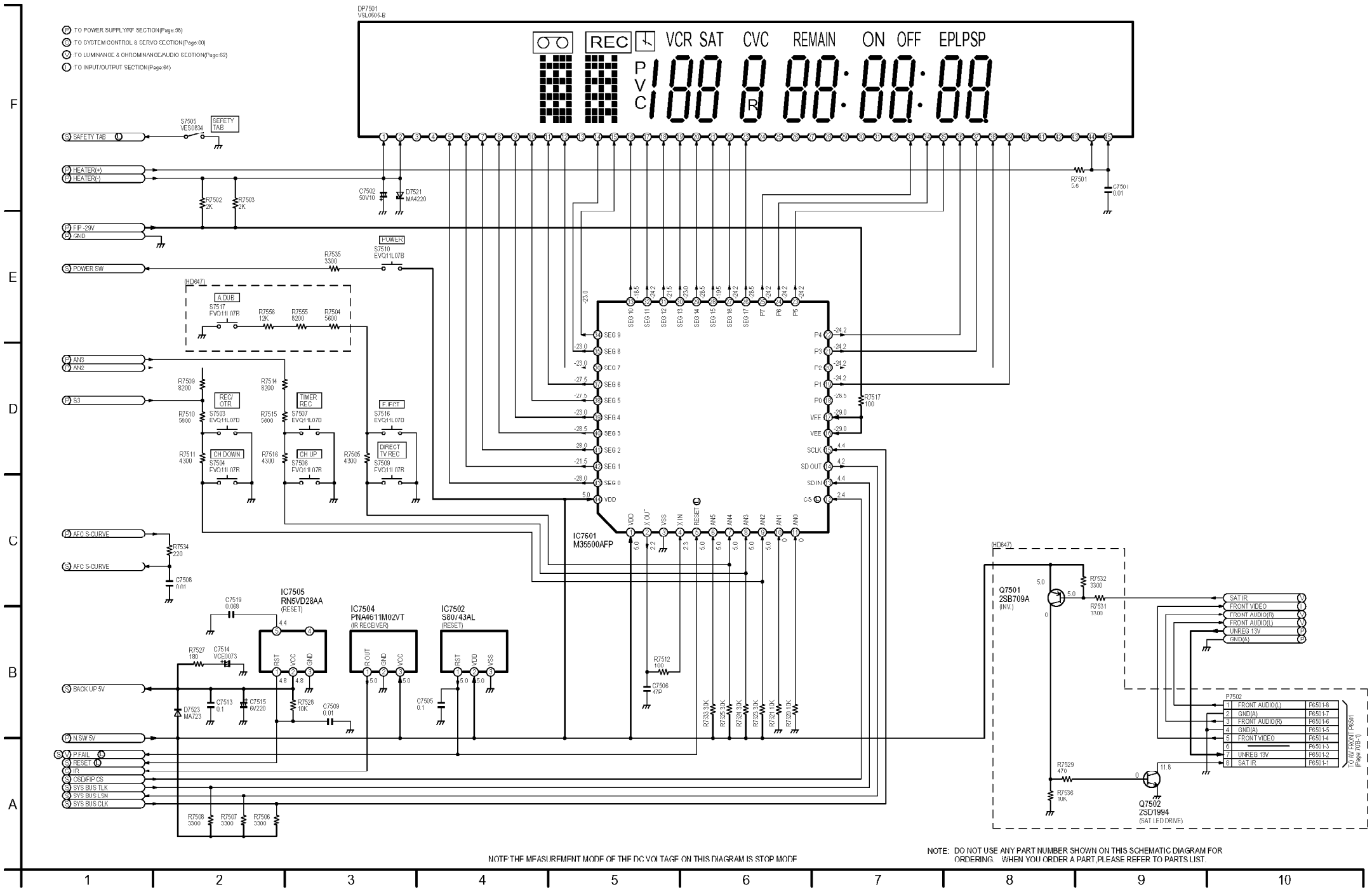
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

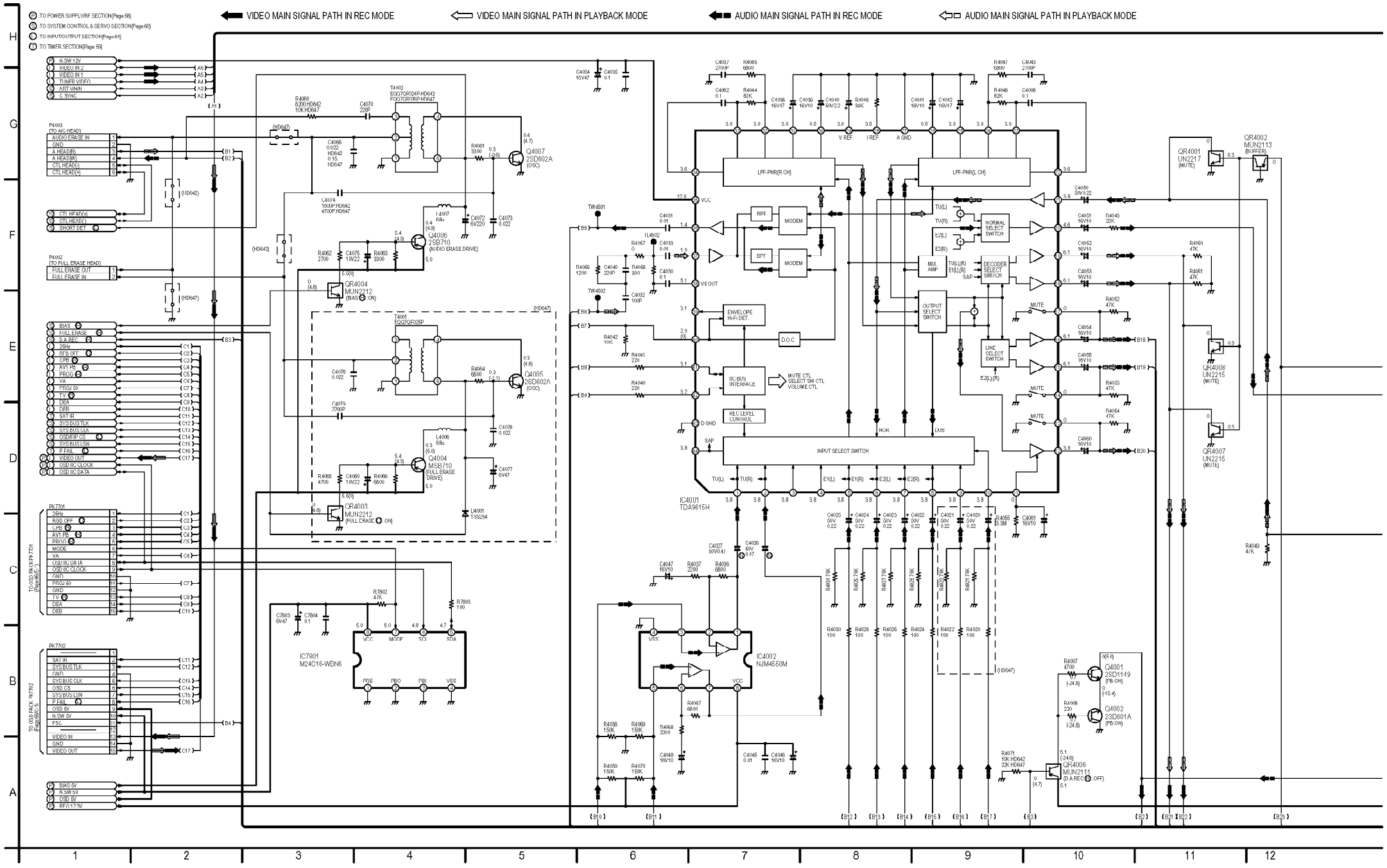
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

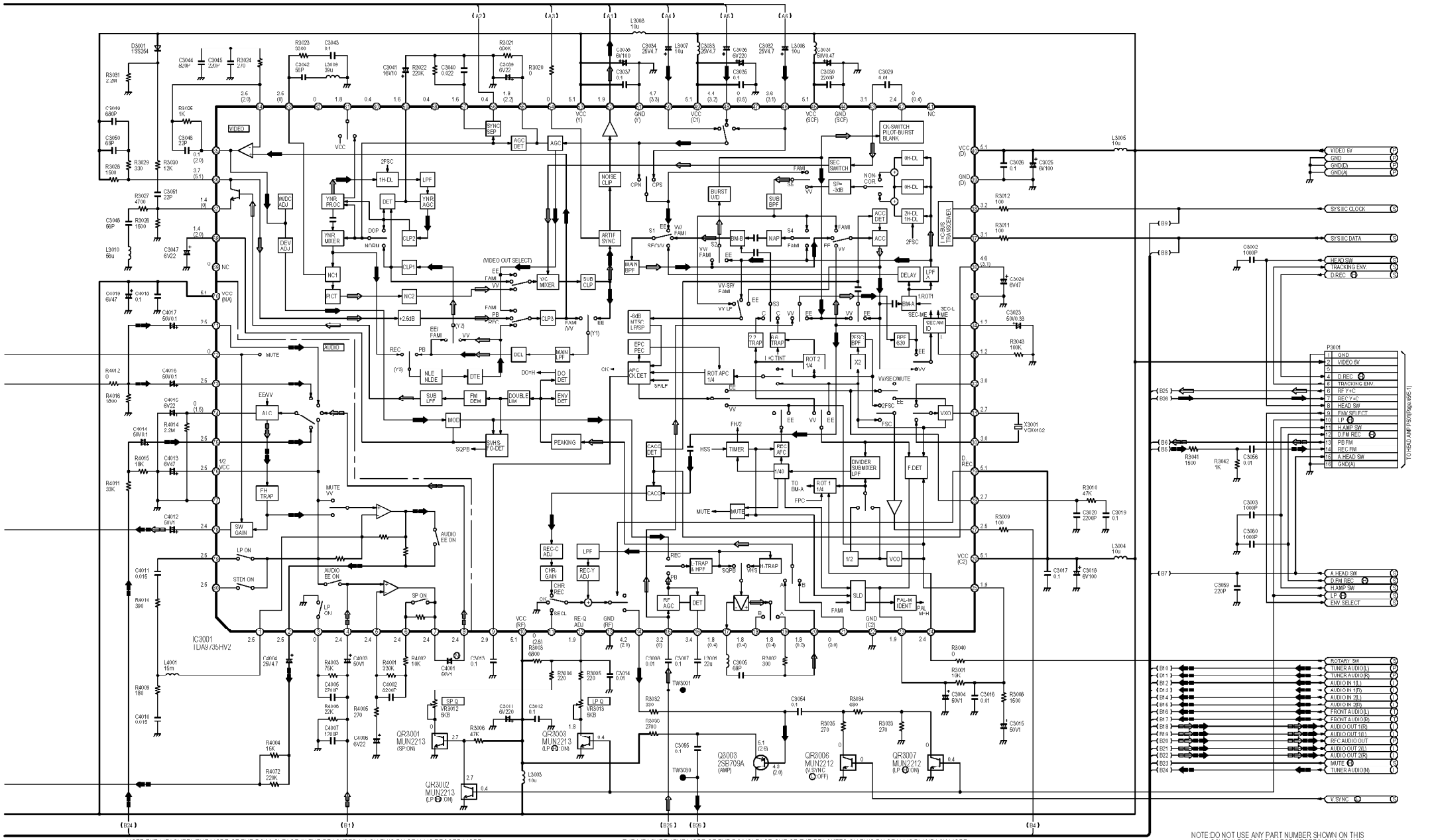

(P) TO POWER SUPPLY/RF SECTION(Page:58)
(V) TO LUMINANCE & CHROMINANCE/AUDIO SECTION(Page:62)
(I) TO INPUT/OUTPUT SECTION(Page:64)
(T) TO TIMER SECTION(Page:59)
CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
IC6001
M37777VFEX
IC1502
RPI054N
(S-REEL)
IC1501
RPI354N
(T-REEL)
QR6004
MUN2212
(D.A.REC ON)
QR2504
MUN2213
(FF/REW OFF)
Q1502
PNB2301MAV
(S-PHOTO)
Q1501
PNB2301MBV
(T-PHOTO)
D1501
SIR505S
SENSOR
QR6003
MUN2212
(CAL ON)
QR6001
MUN2111
(LP ON)
QR6002
MUN2211
(SLEEP OFF)
MODE SW
S1601
VSS0520
REG.6V
EX.SYSTEM.5V
AUDIO DEF
AFC S-CURVE
CTL HEAD(+)
CTL HEAD(-)
C.SYNC
SHORT DET
POWER SW
SAFETY TAB
SYS.IIC DATA
SYS.IIC CLOCK
IN.SW.5V
TRACKING ENV.
ART V/H/N
IR
ROTARY SW
ENV.SELECT
D.FM REC
D.A.REC
BIAS
H.AMP SW
MUTE
V.SYNC
FULL ERASE
FIP
OSD/FIP CS
HEAD SW
A.HEAD SW
D.REC
RESET
P.FAIL
SYS.BUS.CLK
SYS.BUS.LSN
SYS.BUS.TLK
PAL I
POWER OFF
SLEEP
SLEEP
LP
CAL
BACK UP.6V
A.DEF
MONO
AFC S
M1/M2
H/N/V/L
N/S/T1/T2
S-PHOTO
T-PHOTO
TRACKING ENV.
ABS.NOR
CURRENT LIMIT
REC.CURR.
ART V/H/N
IR
ROTARY SW
H.AMP SW
ENV.SELECT
VIDEO H.SW
AUDIO H.SW
REC
D.REC
CURR.EMPH
D.FM REC
V.EE
TRICK
D.A.REC
BIAS
FM MUTE
V.SYNC
F.ERASE
CHEND
+5V(AD)
+5V(A)
FB CTL OUT
CTL AMP GND
CTL AMP REF
C'L AMP IN
CTL AMP SW
CTL HEAD(Y)
CTL HEAD(-)
IREF
OREF
GND
SECAM/24
CYL.PG
CAP.FG IN
CSYNC
SHORT D
POWER ON
STAB
T-REEL PULSE
S-REEL PULSE
CYL.ET
CAP.ET
CAP.R/F
P.FAIL
STAND BY
125Hz
IIC.D
IIC.C
T.CLK
T.LSN
T.TLK
5P.CLOCK
5P.DATA IN
5P.DATA OUT
PRE ROLL
EDIT TRIG
SYSTEM 1
SYSTEM 5
SYSTEM 2
SYSTEM 4
SLEEP
SP
LOADING
UNLOADING
PB.AI.2
PB.AI.1
FF/REW
P.OFF
POSI.SW3
POSI.SW2
POSI.SW1
GND
GND
16M.START
+5V(D)
16MHz IN
16MHz OUT
GND(OSC)
12MHz IN
12MHz OUT
RESET
FIP
OSD/FIP CS
CH.CHANGE
CH.START
CAL
N.MES
M SPEED
TW2002
TW2001
TW6002
TL6010
TL6012
TL6013
TL2502
TL2503
L6001 220u
C6021 0.022
C6009 2200P
R6017 2200
R6063 5600
C2519 0.1
C2520 3900P
D2504 1SS254
R6040 47K
C6011 6V47
C1601 220P
R6025 120
R6035 1K
C6024 0.1
D6001 MA700
C2514 16V10
C2517 6V47
C2513 6V220
C6007 15CP
C6001 1
C2519 25V4.7
R6007 27K
R6011 10K
R6005 10K
R6033 27K
R6032 39K
R6031 27K
R2513 270K
C6013 16V10
R6010 22K
R6006 1K
C6012 1000P
R6003 1K
R6027 1K
D6002 MA700
C6018 1000P
R6038 100
R6037 100
R6036 100
C6020 0.1
R6021 1M
R6020 1K
X6001 VSX0830
C6004 12P
C6003 20P
R6019 10M
R6018 220K
X6002 VSX0660
C6005 10P
C6002 10P
R2511 43K
R6023 100P
R6022 100P
R6015 27K
R6016 27K
R6014 180
R2515 10K
R2514 1K
R2516 1UK
C2509 0.068
C2508 0.068
R2510 1K
C2510 0.056
C2507 0.056
R6013 4700
R6012 4700
R6009 2700
R6008 2700
R6001 4700
R6034 10K
R6022 1K
C6019 0.01
C1
C2
C3
C8
C9
C10
(A1) (A3) (A7) (A8) (A9) (A16) (A17) (A10) (A11) (A12) (A13) (A14)
(B1) (B2) (B3) (B4) (B7) (B9) (B10) (B11) (B12) (B13) (B18) (B19) (B21) (B22) (B23) (B27) (B30) (B32) (B33) (B34) (B36) (B37) (B38) (B39)
1 2 3 4 5 6 7 8 9 10
G F E D C B A



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.


DP7501
VSL0505-B
REC
VCR SAT CVC REMAIN ON OFF EPLPSP
P
V
C
R
:TO POWER SUPPLY/RF SECTION(Page:98)
:TO SYSTEM CONTROL & SERVO SECTION(Page:60)
:TO LUMINANCE & CHROMINANCE/AUDIO SECTION(Page:62)
:TO INPUT/OUTPUT SECTION(Page:64)
SAFETY TAB
S7505 VES0834
HEATER(+)
HEATER(-)
FIP -29V
GND
POWER SW
POWER
S7510 EVQ11L07B
R7535 3300
R7501 0.0
C7501 0.01
C7502 50V10
D7521 MA4220
R7502 2K
R7503 2K
(HD647)
A.DUB
S7517 EVQ11L07R
R7556 12K
R7555 8200
R7504 5600
AN3
AN2
S3
REC/OTR
TIMER REC
EJECT
S7503 EVQ11L07D
S7507 EVQ11L07D
S7516 EVQ11L07D
R7509 8200
R7514 8200
R7510 5600
R7515 5600
R7511 4300
R7516 4300
R7505 4300
CH DOWN
CH UP
DIRECT TV REC
S7504 EVQ11L07R
S7506 EVQ11L07R
S7509 EVQ11L07R
AFC S-CURVE
R7534 220
C7508 0.01
IC7501
M35500AFP
SEG 10
SEG 11
SEG 12
SEG 13
SEG 14
SEG 15
SEG 16
SEG 17
SEG 9
SEG 8
SEG 7
SEG 6
SEG 5
SEG 4
SEG 3
SEG 2
SEG 1
SEG 0
VDD
P7
P6
P5
P4
P3
P2
P1
P0
VFF
VEE
SCLK
SD OUT
SD IN
CS
XOUT
VSS
XIN
RESET
AN5
AN4
AN3
AN2
AN1
AN0
R7517 100
IC7505
RN5VD28AA
(RESET)
IC7504
PNA4611M02VT
(IR RECEIVER)
IC7502
S80743AL
(RESET)
C7519 0.068
R7527 180
C7514 VCE0073
C7513 0.1
C7515 6V220
R7528 10K
C7509 0.01
D7523 MA723
C7505 0.1
R7512 100
C7506 47P
R7533 33K
R7525 33K
R7524 33K
R7523 33K
R7521 10K
R7520 10K
BACK UP 5V
N.SW 5V
P.FAIL
RESET
IR
OSD/FIP CS
SYS BUS TLK
SYS BUS LSN
SYS BUS CLK
R7508 3300
R7507 3300
R7506 3300
(HD647)
Q7501
2SB709A
(INV.)
R7532 3300
R7531 3300
SAT IR
FRONT VIDEO
FRONT AUDIO(R)
FRONT AUDIO(L)
UNREG 13V
GND(A)
P7502
1 FRONT AUDIO(L) P6501-8
2 GND(A) P6501-7
3 FRONT AUDIO(R) P6501-6
4 GND(A) P6501-5
5 FRONT VIDEO P6501-4
6 P6501-3
7 UNREG 13V P6501-2
8 SAT IR P6501-1
TO A/V FRONT P6501 (Page 70B-1)
R7529 470
R7536 1UK
Q7502
2SD1994
(SAT LED DRIVE)
NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.


P :TO POWER SUPPLY/RF SECTION(Page:56)
S :TO SYSTEM CONTROL & SERVO SECTION(Page:60)
I :TO INPUT/OUTPUT SECTION(Page:64)
T :TO TIMER SECTION(Page:59)
VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE
IC4001 TDA9815H
IC4002 NJM4558M
IC7801 M24C16-WDN6
Q4001 2SD1149
Q4002 2SD601A
Q4003 MUN2212
Q4004 MSB710
Q4005 2SD602A
Q4006 MUN2111
Q4007 2SD602A
Q4U06 2SB710
QR4001 UN2217
QR4002 MUN2113
QR4003 MUN2212
QR4004 MUN2212
QR4005 UN2215
QR4006 MUN2111
QR4007 UN2215
QR4008 UN2215
LPF-PNR(R CH)
LPF-PNR(L CH)
MODEM
ENVELOPE Hi-Fi DET.
D.O.C
IIC BUS INTERFACE
REC LEVEL CONTROL
INPUT SELECT SWITCH
NORMAL SELECT SWITCH
DECODER SELECT SWITCH
OUTPUT SELECT SWITCH
LINE SELECT SWITCH
MIX AMP
V6 OUT
V REF.
I REF.
A GND
D GND
VCC
SAP
NOR
DUB
MUTE CTL
SELECT SW CTL
VOLUME CTL



NOTE:THE MEASUREMENT MODE OF THE DC VLOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL (SP MODE)

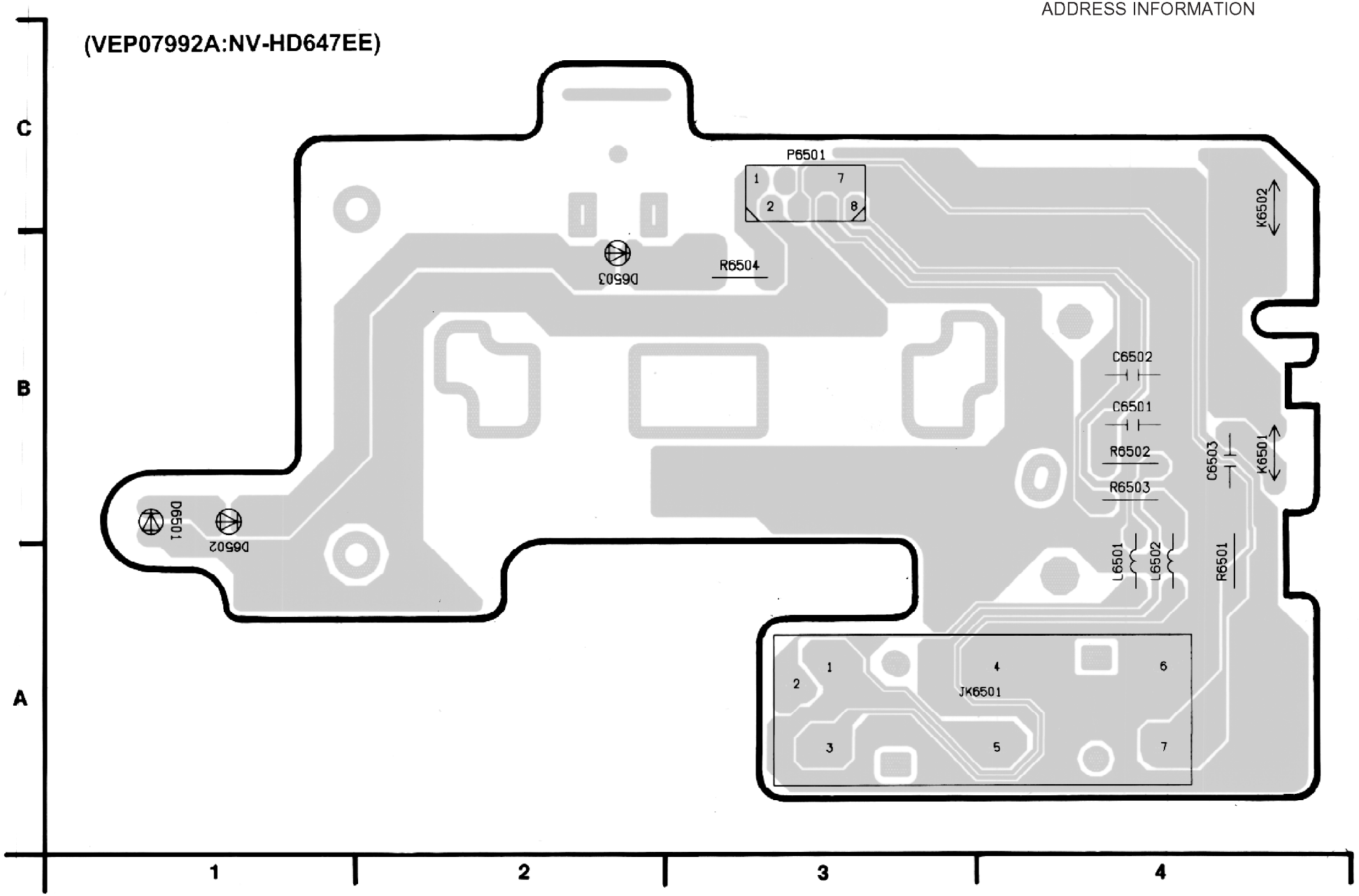
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

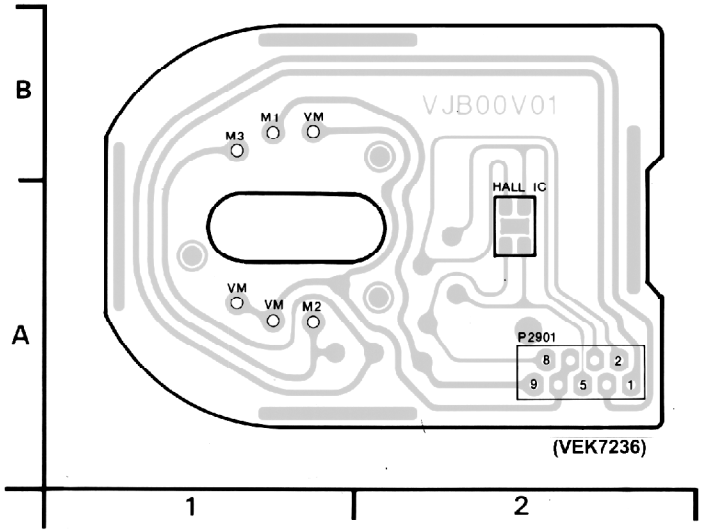
13 14 15 16 17 18 19 20 21 22 23

AV FRONT C.B.A.	
Connector	
P6501	C-3

ADDRESS INFORMATION

(VEP07992A:NV-HD647EE)



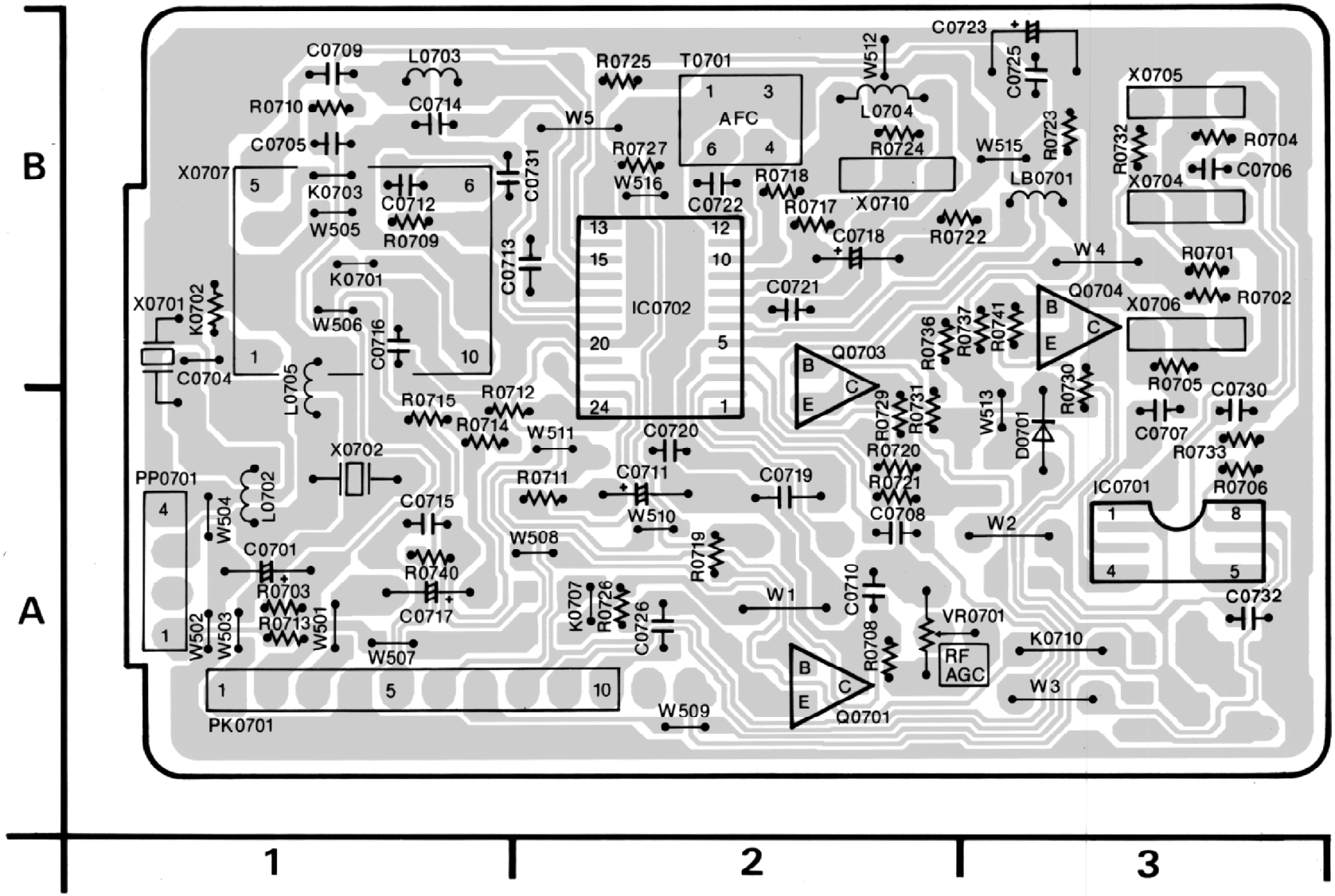


(VEK7236)

CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	A-2
Connector	
P2901	A-2

ADDRESS INFORMATION

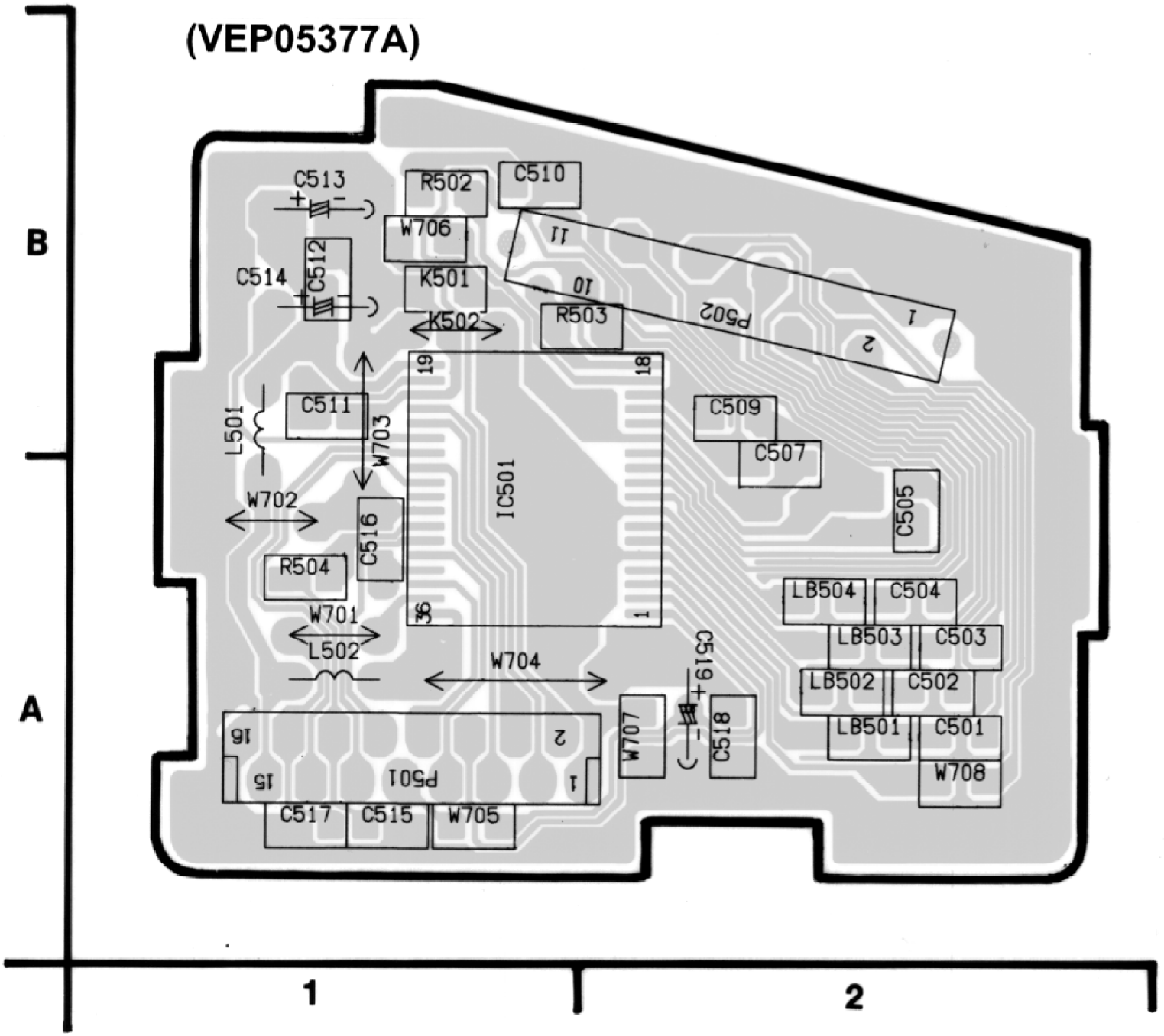
(VEP07978B)



TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0701	A-2
Q0703	B-2
Q0704	B-3
Integrated Circuit	
IC0701	A-3
IC0702	B-2
Adjustment	
T0701	B-2
VR0701	A-2
Connector	
PK0701	A-1
PP0701	A-1

ADDRESS INFORMATION

(VEP05377A)

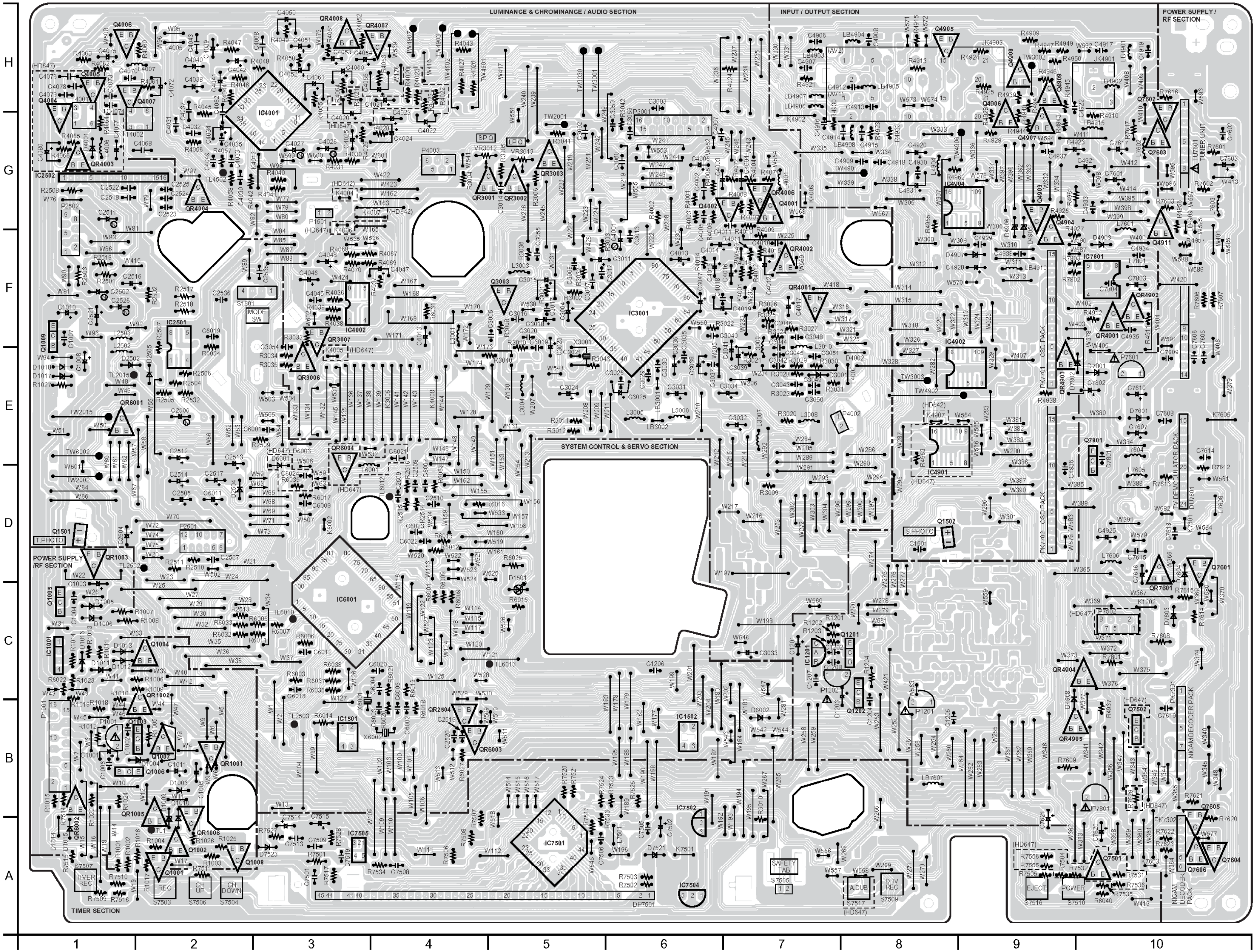


HEAD AMP C.B.A.	
Integrated Circuit	
IC501	A-1
Connector	
P501	A-1
P502	B-2

ADDRESS INFORMATION

(VEP06D11C:NV-HD642EE/EE-K)(VEP06D11F:NV-HD647EE)

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



LUMINANCE & CHROMINANCE / AUDIO SECTION
INPUT / OUTPUT SECTION
POWER SUPPLY / RF SECTION
SYSTEM CONTROL & SERVO SECTION
POWER SUPPLY /RF SECTION
TIMER SECTION
IC4001
IC3001
IC6001
IC7501
IC2501
IC2502
IC4002
IC4902
IC4904
IC4901
IC7801
IC1001
IC1501
IC1502
IC7502
IC7504
IC7505
IC1201
TU7601 TUNER UNIT
OSD PACK
TV DEMODULATOR PACK
NICAM DECODER PACK
MODE SW
T.PHOTO
S.PHOTO
SAFETY TAB
TIMER REC
REC
CH UP
CH DOWN
A.DUB
D.TV REC
EJECT
POWER
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10

MAIN C.B.A.

Transistor	
Q1001	A-2
Q1002	A-2
Q1003	B-2
Q1004	C 2
Q1005	C-1
Q1006	B-2
Q1007	B-2
Q1008	A-2
Q1009	F-1
Q1201	C-8
Q1202	C-8
Q1501	D-1
Q1502	D-8
Q3003	F-5
Q4001	G-7
Q4002	G-7
Q4004	H-1
Q4005	H 1
Q4006	H-1
Q4007	H-2
Q4903	G-9
Q4904	G-9
Q4905	H-8
Q4906	G-9
Q4907	G-9
Q4908	H-9
Q4909	H-9
Q4911	F-10
Q7501	A-10
Q7502	B-10
Q7601	D-10
Q7602	H-10
Q7603	G-10
Q7604	A-10
Q7605	B-10
Q7606	A-10
Q7801	E-10

Transistor & Resistor	
QR1001	B-2
QR1002	C-2
QR1003	D-1
QR1005	B-2
QR1006	A-2
QR2504	B-4
QR3001	G-5
QR3002	C-5
QR3003	G-5
QR3006	E-3
QR3007	F-3
QR4001	F-7
QR4002	F-7
QR4003	G-1
QR4004	C-2
QR4006	G-7
QR4007	H-4
QR4008	H-3
QR4901	F-10
QR4902	F-10
QR4903	E-9
QR4904	C-9
QR4905	B-9
QR6001	E-1
QR6002	A-1
QR6003	B-4
QR6004	E-3
QR7601	D-10

Integrated Circuit	
IC1001	C-1
IC1201	C-7
IC1501	B-3
IC1502	B 6
IC2501	F-2
IC2502	G-1
IC3001	F-6
IC4001	H-3
IC4002	F-3
IC4901	D-8
IC4902	F-8
IC4904	G-8
IC6001	C-3
IC7501	A-5
IC7502	B-6
IC7504	A-6
IC7505	A-3
IC7801	F 10

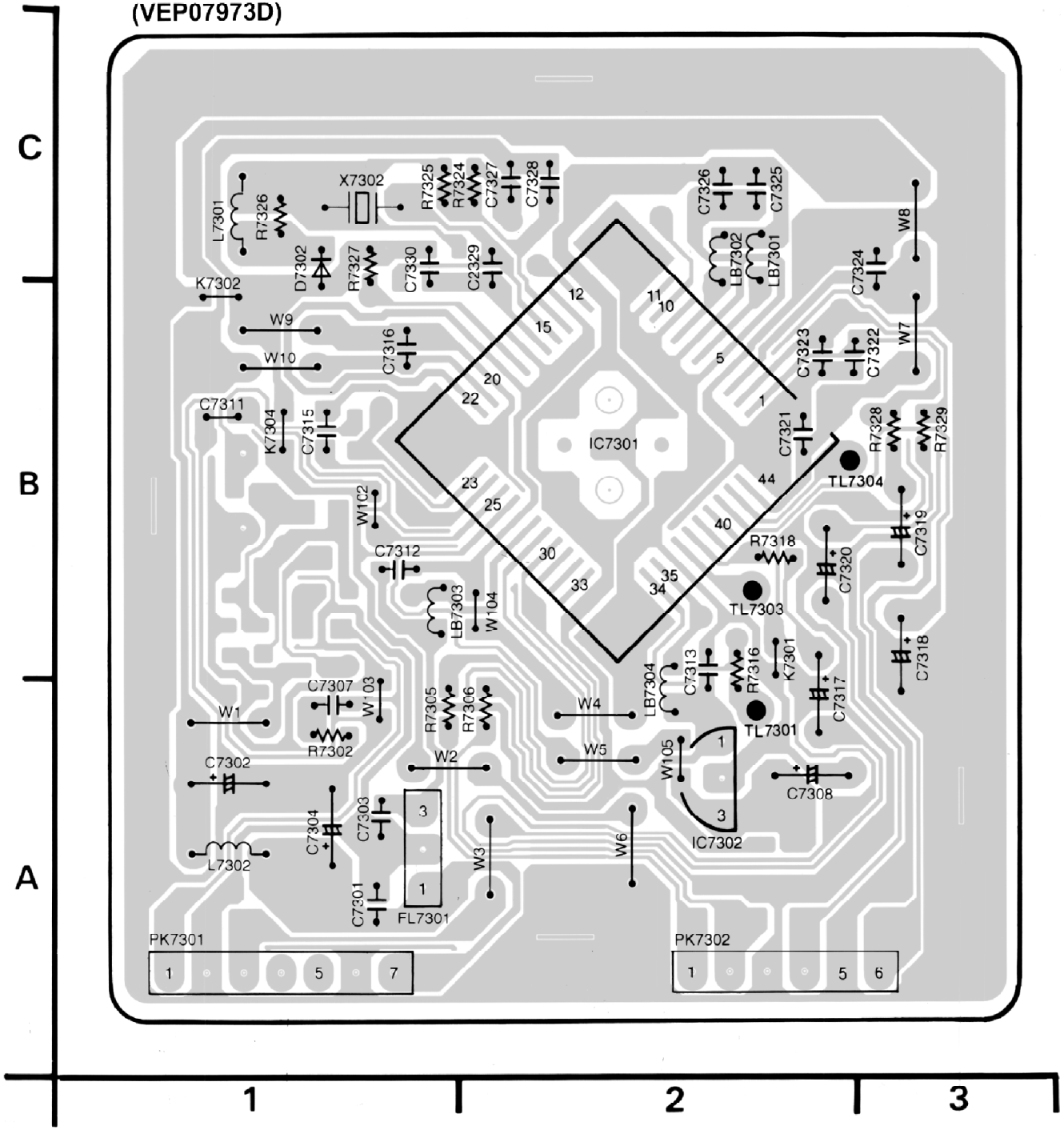
Test Point	
TL1	A-2
TL2015	E-1
TL2502	D-2
TL2503	B-3
TL4502	G-2
TL6010	C-3
TL6012	D-4
TL6013	C-5
TW2001	G-5
TW2002	D-1
TW2015	E-1
TW3001	H-5
TW3002	H-9
TW3003	E-8
TW3030	H-5
TW4501	H-4
TW4502	H-4
TW4901	G-8
TW4902	E-8
TW4903	H-4
TW4906	G-8
TW4907	H-4
TW6002	E-1

Adjustment	
VR3012	G-4
VR3013	G-5

Connector	
P1001	B-1
P1501	G-3
P2501	D-2
P2502	G-1
P3001	G-6
P4002	E-8
P4003	C-4
P7502	C-10
DU7601	D-10
PK7301	B-10
PK7302	A-10
PK7701	E-9
PK7702	D-9
TU7601	C-10

ADDRESS INFORMATION

(VEP07973D)



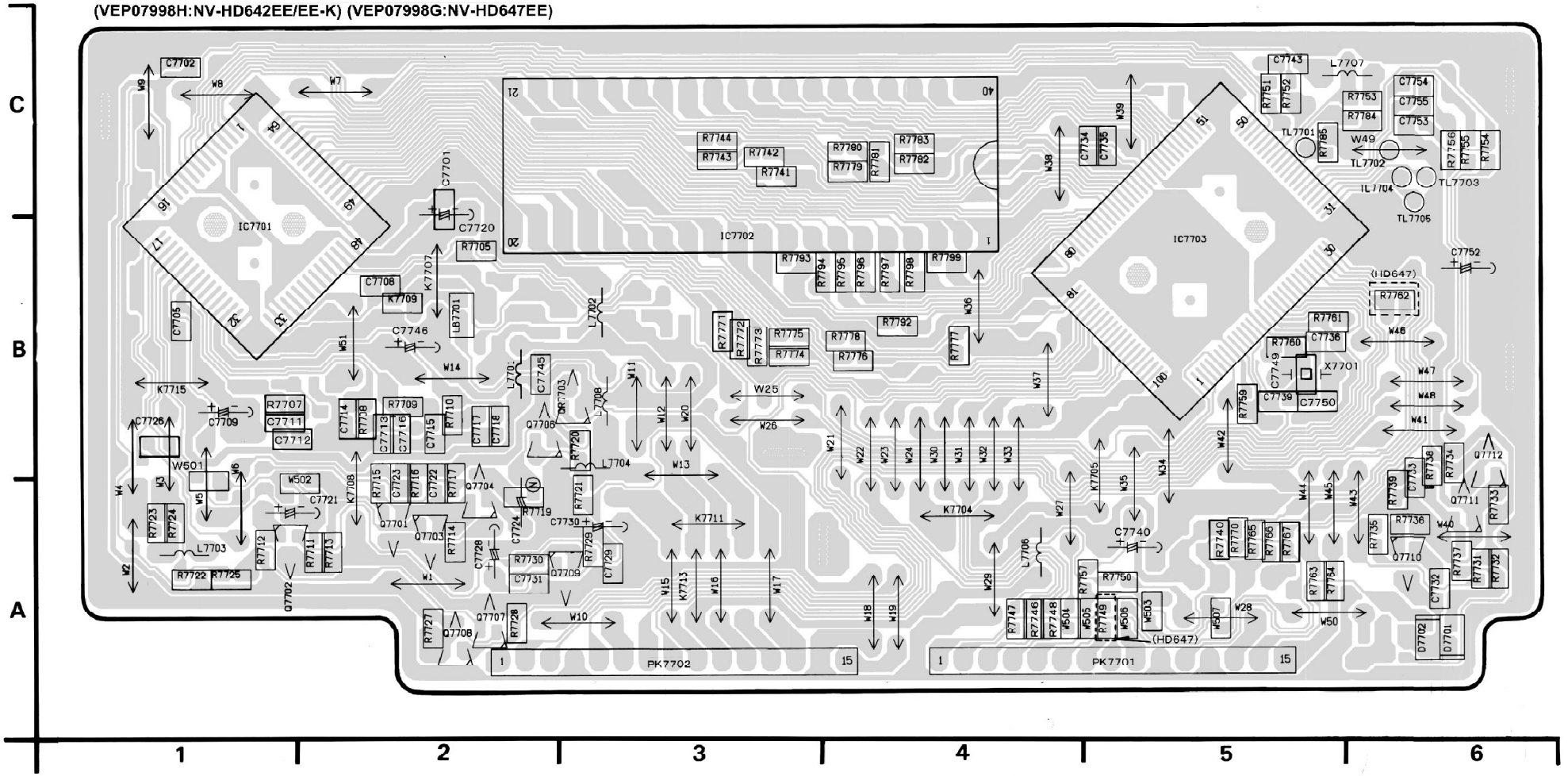
NICAM DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
IC7302	A-2
Test Point	
TL7301	A-2
TL7303	B-2
TL7304	B-2
Connector	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

OSD PACK C.B.A.			
Transistor		**Integrated Circuit**	
Q7701	A-2	IC7701	B-1
Q7702	A-1	IC7702	C-3
Q7703	A-2	IC7703	B-5
Q7704	A-2	**Test Point**	
Q7706	B-2	TL7701	C-5
Q7707	A-2	TL7702	C-6
Q7708	A-2	TL7703	C-6
Q7709	A-3	TL7704	C-6
Q7710	A-6	TL7705	C-6
Q7711	A-6	**Connector**	
Q7712	B-6	PK7701	A-5
Transistor & Resistor		PK7702	A-3
QR7703	B-3		

ADDRESS INFORMATION

(VEP07998H:NV-HD642EE/EE-K) (VEP07998G:NV-HD647EE)



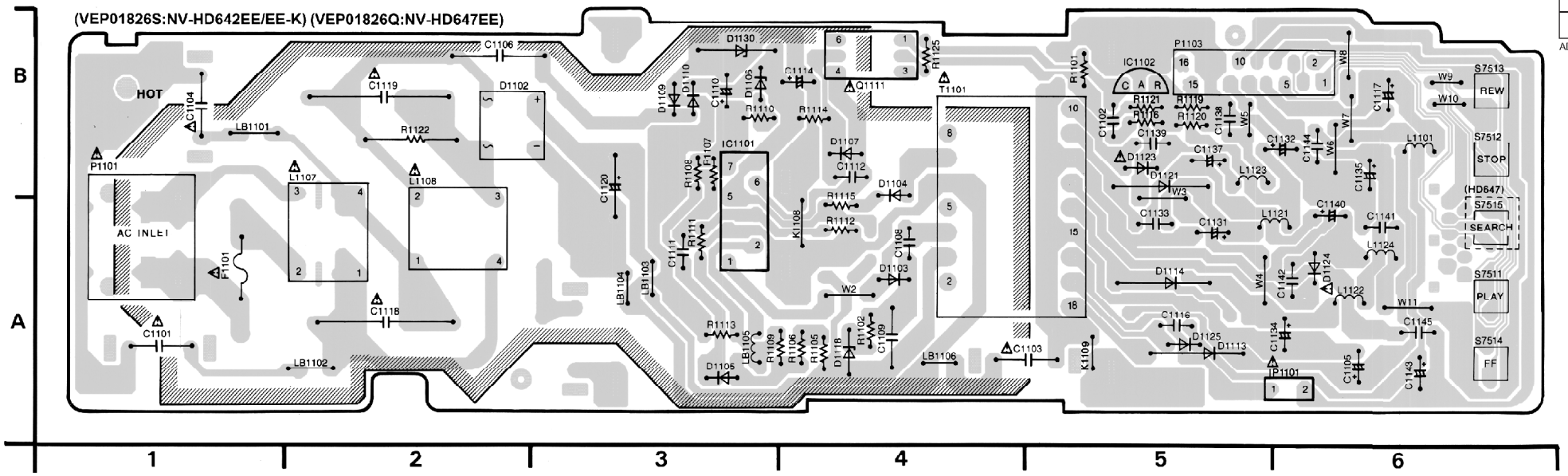
CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

POWER C.B.A.	
Transistor	
Q1111	B-4
Integrated Circuit	
IC1101	B-3
IC1102	B-5
Connector	
P1101	B-1
P1103	B-5

ADDRESS INFORMATION



443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (–)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (–)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [–]	CONTROL HEAD (–)
CTL [+]	CONTROL HEAD (+)
CTL [–]	CONTROL HEAD (–)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL

CYL GND	CYLINDER GND	FULL. E. 12V	FULL ERASE 12V
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ	GND [A]	GND (ANALOG)
D. FM REC [L]	DELAIED FM RECORDING Ⓛ	GND [TU]	GND (TUNER)
D. GND	DIGITAL GND	GND/N. SW. 12V	GND/NON SW 12V
D. REC [H]	DELAYED RECORDING Ⓗ	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [–]	HEATER (–)
EC	ERROR TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE	HTR [+]	HEATER (+)
		HTR [–]	HEATER (–)
EDT TRIG [L]	EDIT TRIGGER Ⓛ	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT Ⓗ	ICL	CONTROL AGC CIRCUIT
EE [H]	EE Ⓗ	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	INS L/R [L]	INSERT Lch/Rch Ⓛ
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT Ⓗ
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP Ⓗ	INSERT [H]	INSERT Ⓗ
EP/LP [H]	LP Ⓗ	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB Ⓗ
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ	JST. CLCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMENT	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [H]	Lch Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [L]	Lch Ⓛ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE Ⓗ	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE Ⓗ	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)	P-OFF [H]	POWER OFF Ⓗ
LINE OUT [L]	LINE OUTPUT (L)	P-OFF [L]	POWER OFF Ⓛ
LINE OUT [R]	LINE OUTPUT (R)	P. FAIL	POWER FAILURE DETECT
LP [H]	LP Ⓗ	P. OFF [H]	POWER OFF Ⓗ
LPTRI [L]	LP TRICK PLAY Ⓛ	P. OFF [L]	POWER OFF Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING	PAL [H]	PAL Ⓗ
M GND	MOTOR GND	PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
M REG	MOTOR REGULATOR	PB ADJ OUT	PLAYBACK ADJUST OUTPUT
MAIN OUT	MAIN OUTPUT	PB OUT	PLAYBACK OUTPUT
MAIN [L]	MAIN Ⓛ	PB. H	PLAYBACK Ⓗ
MAIN/MONO	MAIN/MONAURAL	PFG	PG/FG
MAX IN	MAXIMAM INPUT	PHOTSN +B	PHOTO SENSOR +B
MES [H]	MESECAM Ⓗ	PICT. CNT	PICTURE CONTROL
MESE [H]	MESECAM Ⓗ	PLAY LED/RVS LED	PLAY LED/REVERSE LED
MESE [L]	MESECAM Ⓛ	PLAY. PO	PLAY POSITION
METER 5V	LEVEL METER 5V	PLAY/R. LED	PLAY LED/REVERSE LED
METER [L]	LEVEL METER (L)	PLY/DEW	PLAY/DEW Ⓗ
METER [R]	LEVEL METER (R)	POWER OFF [L]	POWER OFF Ⓛ
METER. L/AVS	LEVEL METER (L)	PREROLL [H]	PREROLL Ⓗ
METER. R/AVC	LEVEL METER (R)	PWRFAIL	POWER FAILURE DETECT
MI/BI [L]	MIX Ⓗ/BILIGUAL	R. CH [H]	Rch Ⓗ
MIC GND	MIC GND	R. CH [L]	Rch Ⓛ
MIC IN	MIC INPUT	R. ST	RESET
MIC IN [L]	MIC INPUT (L)	R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
MIC IN [R]	MIC INPUT (R)	RCH [H]	Rch Ⓗ
MIC [H]	MIC Ⓗ	REC 12V	RECORDING 12V
MIX [H]	MIX Ⓗ	REC CHROMA	RECORDING CHROMINANCE SIGNAL
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ	REC H	RECORDING Ⓗ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ	REC IN	RECORDING INPUT
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ	REC OUT [L]	RECORDING OUTPUT Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ	REC START	RECORDING START
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ	REC VR [C]	RECORDING VOLUME (COMMON)
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ	REC VR [L]	RECORDING VOLUME (L)
MODE SEL	AUDIO MODE SELECT	REC VR [R]	RECORDING VOLUME (R)
MODE SW	AUDIO MODE SW	REC Y	RECORDING LUMINANCE SIGNAL
MODE. S. IN	AUDIO MODE SELECT INPUT	REC [H]	RECORDING Ⓗ
MODE. S. OUT	AUDIO MODE SELECT OUTPUT	REC. C	RECORDING CHROMINANCE SIGNAL
MONO [H]	MONAURAL Ⓗ	REC. Y	RECORDING LUMINANCE SIGNAL
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ	REC/EE CTL	RECORDING/EE CONTROL
MONO2 [L]	MONAURAL 2	REEL-T	REEL PULSE (TAKE-UP)
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)	REEL-S	REEL PULSE (SUPPLY)
MOTOR GND	MOTOR GND	REGULATOR FILTER	REGULATOR FILTER
MUTE	MUTE	RESET	RESET
N. A. REC [L]	NORMAL AUDIO RECORDING	REV M F/R	REVIEW MOTOR
N. SW 12V	NON SW 12V		FORWARD/REVERSE
N. SW. 5. DET	NON SW 5V DETECT	REV M V1	REVIEW MOTOR V1
NICAM	NICAM	REV M V2	REVIEW MOTOR V2
NICAM [L]	NICAM Ⓛ	REV MOTOR F/R	REVIEW MOTOR
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ		FORWARD/REVERSE
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ	REV MOTOR V1	REVIEW MOTOR V1
NORMAL [H]	NORMAL Ⓗ	REV MOTOR V2	REVIEW MOTOR V2
NR BIAS	NR BIAS	REV MOTOR [+]	REVIEW MOTOR (+)
NTSC [L]	NTSC Ⓛ	REV MOTOR [−]	REVIEW MOTOR (+)
OCH	CONTROL AGC CIRCUIT	REV. M. GND	REVIEW MOTOR GND
OUT	OUTPUT	RF. CHROMA	RF CHROMINANCE SIGNAL

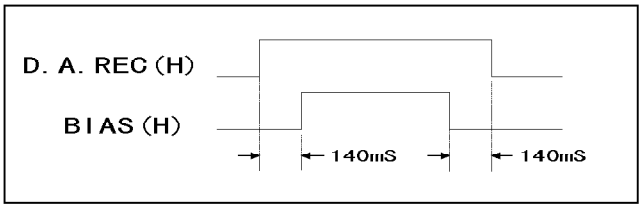
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [–]	SOLENOID (–)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓘ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

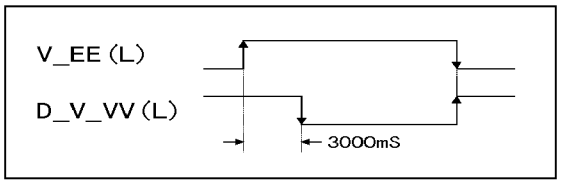
INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.OFF	---	---	---	---	---	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
VPS STAND BY	EXT	---	---	L	NORMAL TUN	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV1	AV1
					AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	OFF	AV1	AV1
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
	DECODER	---	---	L	NORMAL TUN	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	AV2 IN	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					AV1	L	AV2 IN	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV2	L	AV2 IN	AV1 IN	L	OFF	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	AV2 IN	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	AV2 IN	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN

INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.ON	EXT	TV	EE	L	NORMAL TUN	---	VTR OUT	VTR OUT	L	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	L	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	L	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	L	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	L	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	L	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	L	OFF	SAT.TUN	SAT.TUN
				H	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
		VTR	EE	L	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
				H	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	TUN
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	AV1
					AV2	---	VTR OUT	VTR OUT	H	ON	AV2	AV2
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	AV3
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	SAT.TUN
			VV	---	NORMAL TUN	---	VTR OUT	VTR OUT	H	OFF	TUN	PB
					C+ TUNER	---	VTR OUT	VTR OUT	H	OFF	TUN	PB
					AV1	---	VTR OUT	VTR OUT	H	OFF	AV1	PB
					AV2	---	VTR OUT	VTR OUT	H	OFF	AV2	PB
					AV3	---	VTR OUT	VTR OUT	H	OFF	AV3	PB
					SAT.NOR TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	PB
					SAT.C+ TUN	---	VTR OUT	VTR OUT	H	OFF	SAT.TUN	PB
	DECODER	TV	EE	L	NORMAL TUN	L	VTR OUT	AV1 IN	L	OFF	TUN	TUN
						H	AV2 IN	AV1 IN	H	ON	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	L	OFF	TUN	TUN
						H	VTR OUT	TUN IN	L	OFF	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	L	OFF	AV1	AV1
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	L	ON	AV2	AV2
						H	AV2 IN	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	L	OFF	AV3	AV3
						H	AV2 IN	AV1 IN	H	ON	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	L	OFF	SAT.TUN	SAT.TUN
						H	AV2 IN	AV1 IN	H	ON	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	L	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	L	OFF	AV2	AV2
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2

INPUT CONDITION							OUTPUT RESULT					
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	RGB SW	VCR IN	VCR OUT
P.ON	DECODER	TV	EE	H	AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
		VTR	EE	L	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV 3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
				H	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	TUN
						H	VTR OUT	AV1 IN	H	OFF	TUN	TUN
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	TUN
						H	VTR OUT	TUN IN	H	ON	AV2	AV2
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	AV1
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV2	L	VTR OUT	AV1 IN	H	ON	AV2	AV2
						H	VTR OUT	AV1 IN	H	ON	AV2	AV2
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	AV3
						H	VTR OUT	AV1 IN	H	OFF	AV3	AV3
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	SAT.TUN
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	SAT.TUN
						H	VTR OUT	SAT IN	H	ON	AV2	AV2
			VV	---	NORMAL TUN	L	VTR OUT	AV1 IN	H	OFF	TUN	PB
						H	VTR OUT	AV1 IN	H	OFF	TUN	PB
					C+ TUNER	L	VTR OUT	TUN IN	H	OFF	TUN	PB
						H	VTR OUT	TUN IN	H	OFF	AV2	PB
					AV1	L	VTR OUT	AV1 IN	H	OFF	AV1	PB
						H	VTR OUT	AV1 IN	H	OFF	AV2	PB
					AV2	L	VTR OUT	AV1 IN	H	OFF	AV2	PB
						H	VTR OUT	AV1 IN	H	OFF	AV2	PB
					AV3	L	VTR OUT	AV1 IN	H	OFF	AV3	PB
						H	VTR OUT	AV1 IN	H	OFF	AV3	PB
					SAT.NOR TUN	L	VTR OUT	AV1 IN	H	OFF	SAT.TUN	PB
						H	VTR OUT	AV1 IN	H	OFF	SAT.TUN	PB
					SAT.C+ TUN	L	VTR OUT	SAT IN	H	OFF	SAT.TUN	PB
						H	VTR OUT	SAT IN	H	OFF	AV2	PB

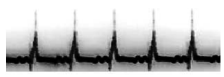
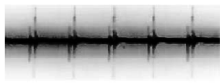
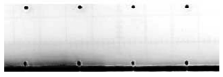
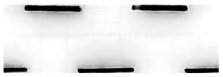
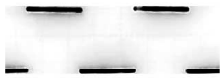
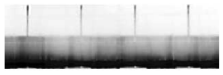
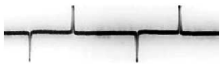
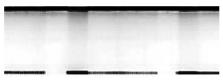
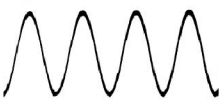
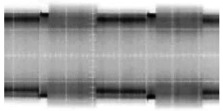
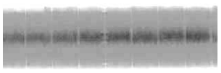
<table>
<tr><th>Pin No.</th><th>In/Out</th><th>Port Name</th><th>Function</th></tr>
<tr><td>1</td><td>O</td><td>AUDIO DEF(H)</td><td>This port is low while Decoder IC is reset.</td></tr>
<tr><td>2</td><td>O</td><td>FORCE MONO(H)</td><td>This port is high while audio mode is set complsory monoraul mode.</td></tr>
<tr><td>3</td><td>I</td><td>AFC(S)</td><td>Tuner S curve input.</td></tr>
<tr><td>4</td><td>O</td><td>Not used</td><td></td></tr>
<tr><td>5</td><td>I</td><td>L6/U6/U4/U2/U2L</td><td>Cylinder unit (HI-FI/Normal) selection.
<table>
<tr><th>Input voltage</th><th>Cylinder Type</th><th>HI-FI/NORMAL</th></tr>
<tr><td>More than 4.2V</td><td>LDD 6CH</td><td>HI-FI</td></tr>
<tr><td>3.0V - 4.2V</td><td>UDD 6CH</td><td>HI-FI</td></tr>
<tr><td>2.0V - 3.0V</td><td>UDD 2CH
(No LP mode)</td><td>NORMAL</td></tr>
<tr><td>0.8V - 2.0V</td><td>UDD 2CH
(LP mode)</td><td>NORMAL</td></tr>
<tr><td>Less than 0.8V</td><td>UDD 4CH</td><td>NORMAL</td></tr>
</table></td></tr>
<tr><td>6</td><td>I</td><td>NORM/SER/T1/T2</td><td>Normal/Service/Test1/Test2 mode selection.
<table>
<tr><th>Input voltage</th><th>Mode</th></tr>
<tr><td>More than 4.0V</td><td>Normal</td></tr>
<tr><td>2.5V - 4.0V</td><td>Service</td></tr>
<tr><td>1.0V - 2.5V</td><td>Test2</td></tr>
<tr><td>Less than 1.0V</td><td>Test1</td></tr>
</table></td></tr>
<tr><td>7</td><td>I</td><td>S-PHOT</td><td>This port receives 2.4V or less when Supply photo sensor detects the tape end.</td></tr>
<tr><td>8</td><td>I</td><td>T-PHOT</td><td>This port receives 2.4V or less when Take-up photo sensor detects the tape beginning.</td></tr>
<tr><td>9</td><td>I</td><td>TRACKING ENVE</td><td>Playback envelope input for auto tracking adjustment and CVC.</td></tr>
<tr><td>10</td><td>O</td><td>Not used</td><td></td></tr>
<tr><td>11</td><td>O</td><td>CURRENT LIMIT</td><td>Capstan motor current limitter output.</td></tr>
<tr><td>12</td><td>O</td><td>REC CUR</td><td>AI recording current control and Playback AI picture VR control.</td></tr>
<tr><td>13</td><td>O</td><td>ART.V/H/N</td><td>This port supplies artificial vertical sync signal to stabilize the picture in special playback mode.</td></tr>
<tr><td>14</td><td>I</td><td>REMOCON</td><td>Remote control signal input and Digital Link input.</td></tr>
<tr><td>15</td><td>O</td><td>ROTARY.SW</td><td>Rotary switching signal output.</td></tr>
<tr><td>16</td><td>O</td><td>H.A.SW</td><td>Head amp switching signal output.</td></tr>
<tr><td>17</td><td>I</td><td>ENVE.SLECT</td><td>This port receives the playback envelope signal level to select the video head in special playback mode.</td></tr>
<tr><td>18</td><td>O</td><td>VIDEO.H.SW</td><td>Video head switching signal output.</td></tr>
<tr><td>19</td><td>O</td><td>AUDIO.H.SW</td><td>Audio head switching signal output.</td></tr>
<tr><td>20</td><td>O</td><td>REC(H)</td><td>Video/audio signal recording/playback control.</td></tr>
<tr><td>21</td><td>O</td><td>D.REC(H)</td><td>Video signal recording on/off control.</td></tr>
<tr><td>22</td><td>O</td><td>C.EMPHA(H)</td><td>This port supplies high during a certain time from starting the recording to control the HI-FI audio recording current.</td></tr>
<tr><td>23</td><td>O</td><td>D.FM.REC(H)</td><td>HI-FI audio recording on/off control.</td></tr>
<tr><td>24</td><td>O</td><td>VIDEO.EE(L)</td><td>This port is low during EE mode.</td></tr>
<tr><td>25</td><td>O</td><td>TRICK(L)</td><td>This port is low during special playback (CUE,REV,SLOW,STILL) mode.</td></tr>
</table>

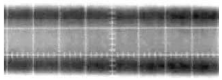
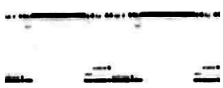
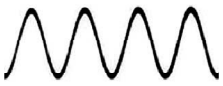
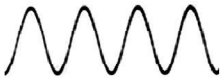
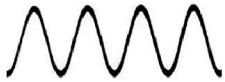
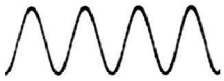
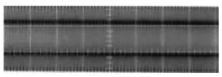
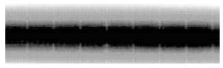
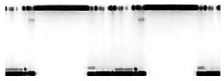
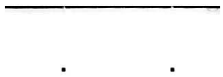
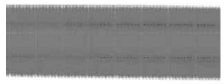
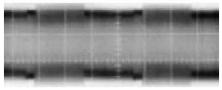
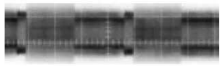
<table>
<tr><th>Pin No.</th><th>In/Out</th><th>Port Name</th><th>Function</th></tr>
<tr><td>26</td><td>O</td><td>D.A.REC(H)</td><td>DC voltage control for recording mode.
 
</td></tr>
<tr><td>27</td><td>O</td><td>BIAS(H)</td><td></td></tr>
<tr><td>28</td><td>O</td><td>FM.MUTE(H)</td><td>This port is high during special playback (CUE,REV,SLOW,STILL) mode, head cleaning and so on.</td></tr>
<tr><td>29</td><td>O</td><td>VSYNC(L)</td><td>This port is low when detecting the V-Sync signal.</td></tr>
<tr><td>30</td><td>O</td><td>FULL.ERASE(H)</td><td>Full erase on/off control.
ON : High
OFF : Low</td></tr>
<tr><td>31</td><td>I</td><td>POS.SW3</td><td rowspan="4">
<table>
<tr><th>P. SW 3</th><th>P. SW 2</th><th>P. SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV,REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING/UNLOADING)</td></tr>
<tr><td rowspan="2">I</td><td rowspan="2">O</td><td rowspan="2">O</td><td>PLAY/REC,STILL/PAUSE,CUE</td></tr>
<tr><td>FWD SLOW,STOP3*1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the Capstan motor shaft.</td></tr>
<tr><td>32</td><td>I</td><td>POS.SW2</td></tr>
<tr><td>33</td><td>I</td><td>POS.SW1</td></tr>
<tr><td>34</td><td>-</td><td>GND</td><td>GND.</td></tr>
<tr><td>35</td><td>-</td><td>GND</td><td>GND.</td></tr>
<tr><td>36</td><td>I</td><td>16M.START(H)</td><td>Clock source selection at starting reset.</td></tr>
<tr><td>37</td><td>-</td><td>5V(D)</td><td>Digital 5V.</td></tr>
<tr><td>38</td><td>I</td><td>16MHz.IN</td><td>Oscillator input.</td></tr>
<tr><td>39</td><td>O</td><td>16MHz.OUT</td><td>Oscillator output.</td></tr>
<tr><td>40</td><td>-</td><td>GND(OSC)</td><td>Oscillator GND.</td></tr>
<tr><td>41</td><td>I</td><td>32KHz.IN</td><td>Oscillator input.</td></tr>
<tr><td>42</td><td>O</td><td>32KHz.OUT</td><td>Oscillator output.</td></tr>
<tr><td>43</td><td>I</td><td>RESET(L)</td><td>This port is low while IC6001 is reset.</td></tr>
<tr><td>44</td><td>O</td><td>FIP(L)</td><td>FIP on/off control.</td></tr>
<tr><td>45</td><td>O</td><td>FIP/OSD CS</td><td>FIP driver and OSD microprocessor chip selection.
FIP driver chip is selected : Low
OSD microprocessor chip is selected : High</td></tr>
<tr><td>46</td><td>O</td><td>Not used</td><td></td></tr>
<tr><td>47</td><td>O</td><td>Not used</td><td></td></tr>
<tr><td>48</td><td>O</td><td>CAL(H)</td><td>This port supplies high during audio IC automatic adjustment.</td></tr>
</table>

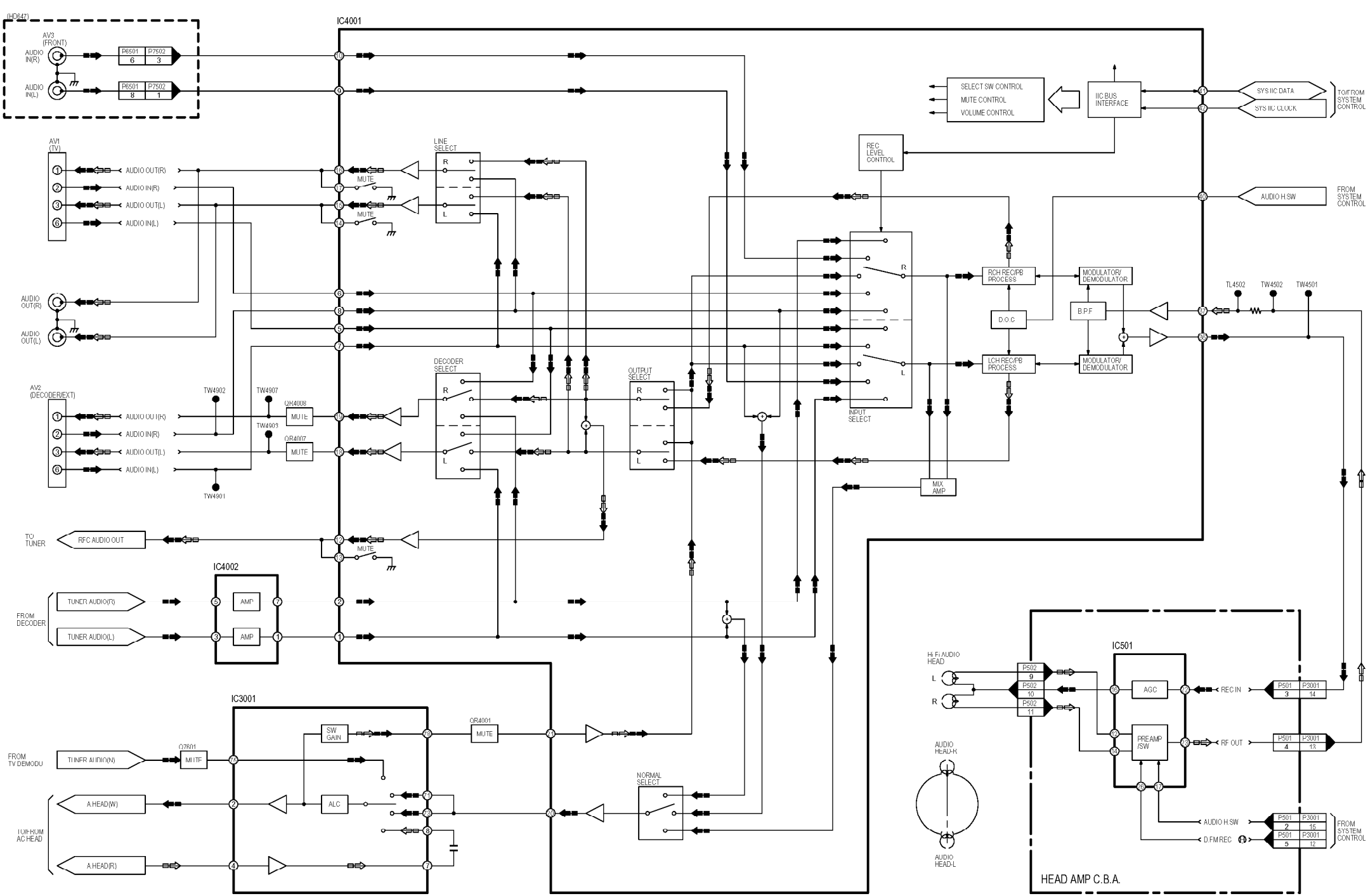
Pin No.	In/Out	Port Name	Function
49	O	AI MES(H)	This port is high when measuring the head and tape condition to determine the optimum recording current before starting the AI recording.
50	O	HALF WAVE(H)	Capstan driver selection.
51	O	P.OFF(H)	Power on/off control.
52	O	FF/REW(L)	This port supplies low during FF and REW modes.
53	O	Not used	
54	O	Not used	
55	O	UNLOADING(H)	This port supplies high during the mechanism is unloaded.
56	O	LOADING(H)	This port supplies high during the mechanism is loaded.
57	O	SP(H)	This port supplies high during SP mode.
58	O	SLEEP(L)	This port supplies low during super power save mode.
59	O	PAL-I/BG/DK	System 4 (Refer to Fig.MP4)
60	O	SECAM/PAL	System 2 (Refer to Fig.MP4)
61	O	NTSC(L)	System 5 (Refer to Fig.MP4)
62	O	D V VV(L)	This port is low during VV mode. 
63	O	Not used	
64	O	Not used	
65	O	T2.DATA.OUT	Serial data output for factory.
66	I	T2.DATA.IN	Serial data input for factory.
67	O	T2.CLOCK	Serial data clock for factory.
68	O	T-BUS/IC.OUT	OSD microprocessor and FIP driver serial data output.
69	I	T-BUS/IC.IN	OSD microprocessor and FIP driver serial data input.
70	O	T-BUS/IC.CLK	OSD microprocessor and FIP driver serial clock output.
71	O	IIC.CLOCK	Tuner and HI-FI audio IC serial clock output.
72	I/O	IIC.DATA	Tuner and HI-FI audio IC serial data input/output.
73	O	125Hz	Oscillator output for main clock adjustment.
74	O	STANDBY(L)	This port supplies low during standby mode.
75	I	POWER FAIL(L)	Power failure detection.
76	O	CAP.R/F	Capstan rotation direction control. Reverse : High Forward : Low
77	O	CAP.ET	Capstan torque control.
78	O	CYL.ET	Cylinder torque control.
79	I	S.REEL.PULSE	Supply reel pulse input.
80	I	T.REEL.PULSE	Take-up reel pulse input.
81	I	STAB(L)	This port receives low when inserting the cassette tape with safety tab.

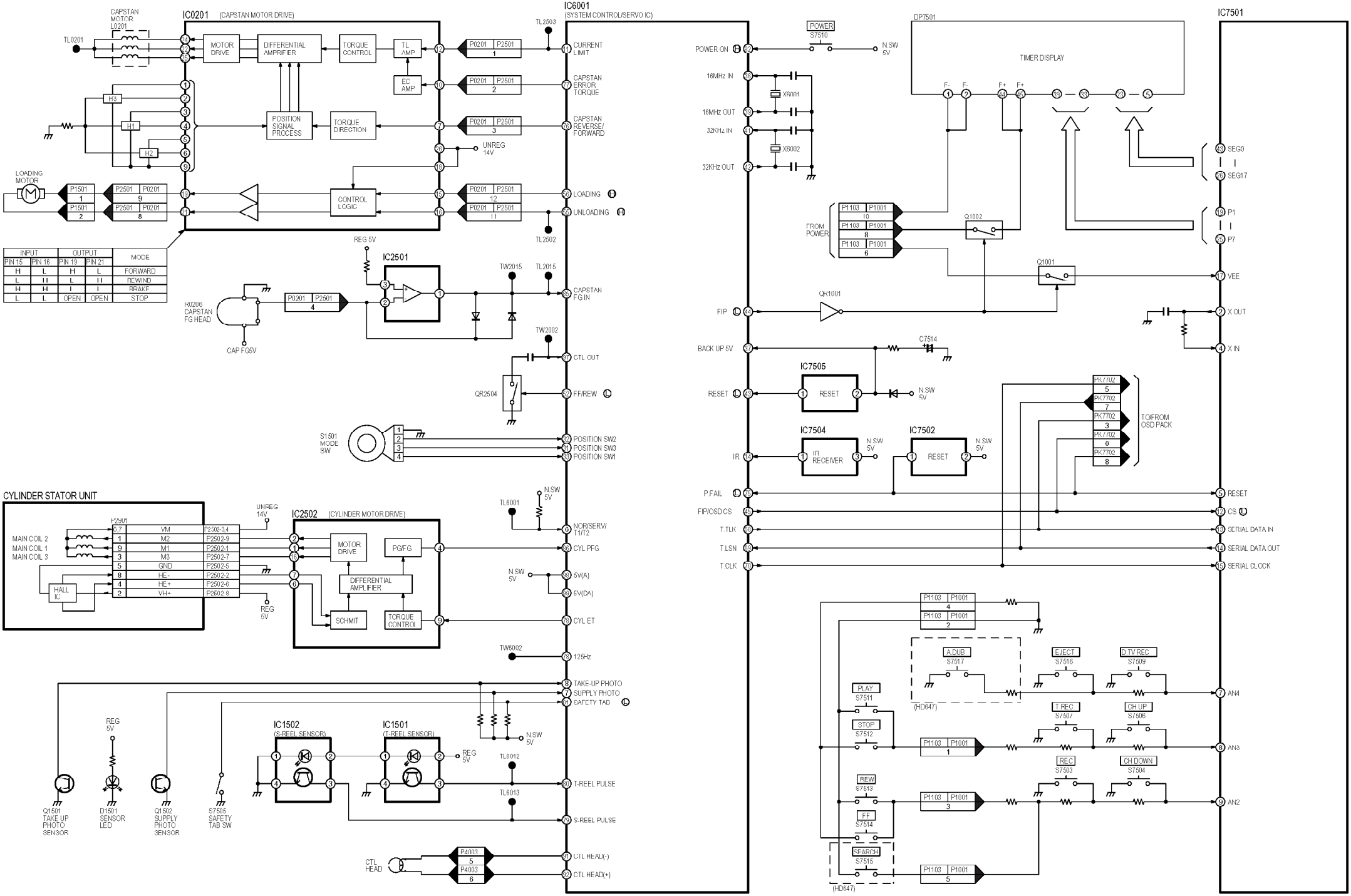
Pin No.	In/Out	Port Name	Function
82	I	POWER KEY(H)	Power on/off key input.
83	I	SHORT DN	DC voltage (BIAS (H)) detection. When detecting High at BIAS (H) during BIAS (H) is set to except high, complsory power is turned off (Self test indication display F08). When detecting Low at BIAS (H) during BAIS (H) is set to high, complsory power is turned off (Self test indication display F07).
84	I	Csync	C sync signal (Built in sync separation circuit) input.
85	I	CAP.FG	Capstan FG input.
86	I	CYL.PFG	Cylinder PFG input.
87	I	SECAM24(H)	Video head selection input. In SECAM model, this port is high when using 24u head chip for LP mode is mounted on the cylinder.
88	-	GND	GND.
89	O	OREF	Op amp output for 1/2 VDD reference.
90	I	IREF	Op amp input for 1/2 VDD reference.
91	I	CTL.HEAD(-)	Control signal (-) input.
92	I	CTL.HEAD(+)	Control signal (+) input.
93	O	CTL.AMP.SW	Control amp switching output.
94	I	CTL.AMP.IN	Control amp input.
95	I	CTL.AMP.REF	Control amp reference input.
96	-	CTL.AMP.GND	Control amp GND.
97	O	PB.CTL.OUT	Control amp output.
98	-	5V(A)	Analog 5V.
99	-	5V(AD)	5V.
100	O	Not used	

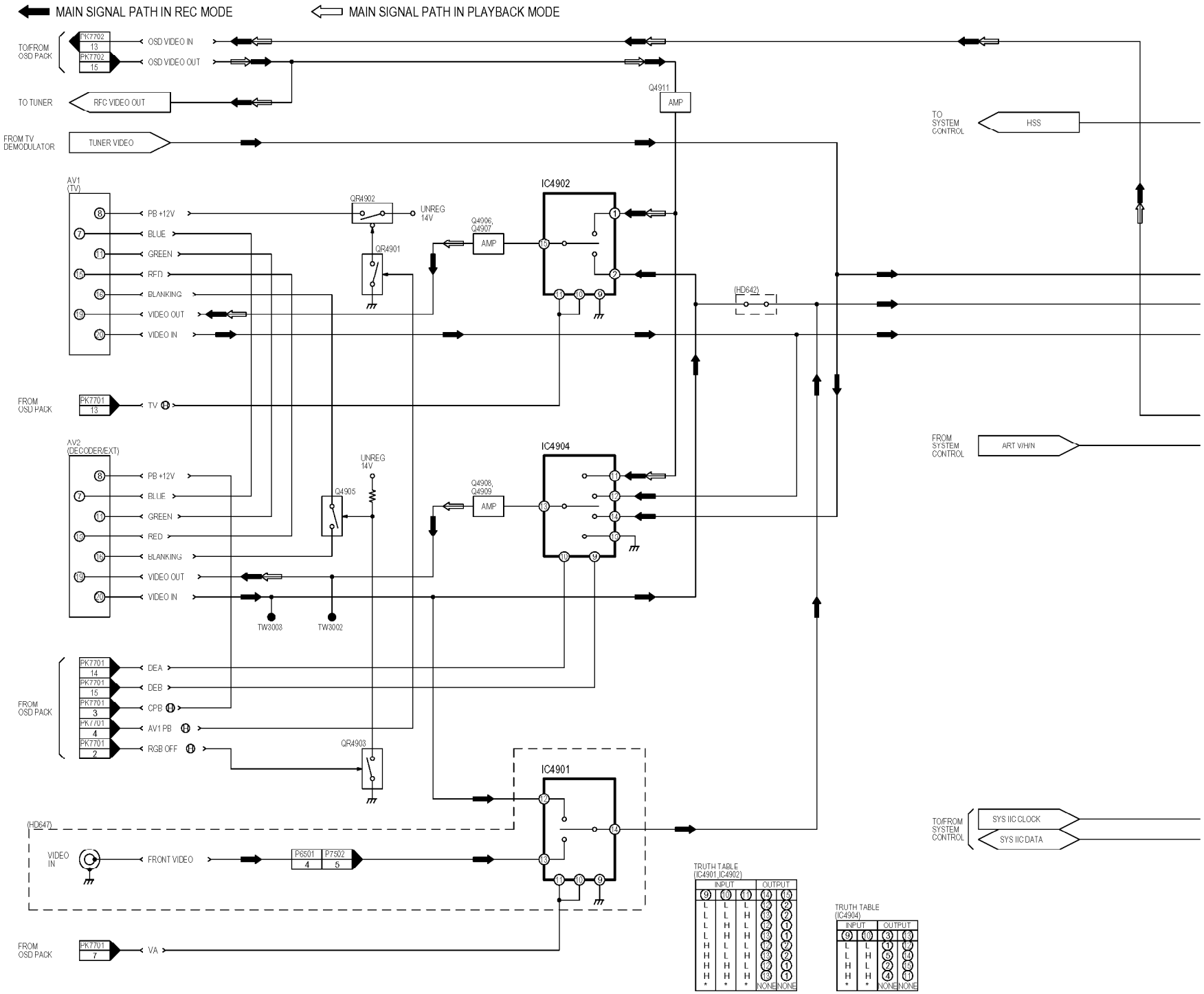
Pin No. / Suffix	System 2 Pin 60	System 4 Pin 59	System 5 Pin 61
ALL	SECAM(L) H : OTHER L : SECAM	I/L/DK/BG H : I/L IN : DK L : BG	NTSC (L) H : 50Hz L : 60Hz

 T1101-3 STOP 8.0Vp-p (2msec. div.)	 T1101-7 STOP 100Vp-p (5µsec. div.)	 IC1101-1 STOP 500Vp-p (5µsec. div.)	 IC1101-2 STOP 11Vp-p (10µsec. div.)	 IC1101-4 STOP 0.8Vp-p (10µsec. div.)
 IC1101-5 STOP 1.4Vp-p (10µsec. div.)	 IC1101-6 STOP 4.0Vp-p (10µsec. div.)	 IC1101-7 STOP 0.6Vp-p (10µsec. div.)	 Q1111-1 STOP 0.5Vp-p (5µsec. div.)	 IC2502-1,2,16 REC 9.0Vp-p (2msec. div.)
 IC6001-13 PAUSE 4.8Vp-p (10msec. div.)	 IC6001-15 REC 4.8Vp-p (10msec. div.)	 IC6001-18 REC 5.0Vp-p (10msec. div.)	 IC6001-68,69 REC 5.0Vp-p (5msec. div.)	 IC6001-70 REC 5.0Vp-p (5msec. div.)
 IC6001-71 REC 5.0Vp-p (5msec. div.)	 IC6001-72 REC 5.0Vp-p (5msec. div.)	 IC6001-79,80 FF/REW 5.0Vp-p (1msec. div.)	 IC6001-84 REC 5.0Vp-p (10msec. div.)	 IC6001-85 REC 0.8Vp-p (5msec. div.)
 IC6001-86 REC 5.0Vp-p (10msec. div.)	 IC6001-91,92 REC 6.0Vp-p (10msec. div.)	 IC6001-97 PLAY 4.2Vp-p (10msec. div.)	 IC7501-4 STOP 2.2Vp-p (0.2µsec. div.)	 IC7501-13,14 STOP 5.0Vp-p (5msec. div.)
 IC7501-15 STOP 5.0Vp-p (5msec. div.)	 IC3001-2 REC 1.5Vp-p (5msec. div.)	 IC3001-4 PLAY 5.0Vp-p (5msec. div.)	 IC3001-14 REC 0.4Vp-p (5msec. div.)	 IC3001-15 PLAY 0.6Vp-p (20µsec. div.)

 IC3001-20 PLAY 150mVp-p (20µsec. div.)	 IC3001-24 REC/PLAY 5.0Vp-p (10msec. div.)	 IC3001-37 REC/PLAY 5.0Vp-p (5msec. div.)	 IC3001-38 REC/PLAY 5.0Vp-p (5msec. div.)	 IC3001-42,43 PLAY 0.4Vp-p (20µsec. div.)
 IC3001-48 REC 1.0Vp-p (20µsec. div.)	 IC3001-52 REC/PLAY 2.0Vp-p (20µsec. div.)	 IC4001-5,6 REC 1.2Vp-p (5msec. div.)	 IC4001-15,16 REC/PLAY 1.2Vp-p (5msec. div.)	 IC4001-20 REC 1.2Vp-p (5msec. div.)
 IC4001-21 REC/PLAY 1.2Vp-p (5msec. div.)	 IC4001-36 REC 0.6Vp-p (20µsec. div.)	 IC4001-37 PLAY 0.5Vp-p (20µsec. div.)	 IC4001-41 REC/PLAY 5.0Vp-p (5msec. div.)	 IC4001-42 REC/PLAY 5.0Vp-p (5msec. div.)
 Q4005-C REC Q4007-C REC 9.0Vp-p (5µsec. div.)	 Q4907-B REC/PLAY Q4909-B REC/PLAY 1.0Vp-p (20µsec. div.)	 PK7701-8,9 REC/PLAY 5.0Vp-p (10msec. div.)	 PK7702-13,15 REC/PLAY 2.0Vp-p (20µsec. div.)	 P501-3 REC 0.3Vp-p (20µsec. div.)
 P501-4 PLAY 1.2Vp-p (20µsec. div.)	 P501-9 REC/PLAY 5.0Vp-p (10msec. div.)	 P501-10 REC 0.3Vp-p (5msec. div.)	 P501-11 PLAY 0.5Vp-p (5msec. div.)	


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
(HD647)
IC4001
AV3 (FRONT)
AUDIO IN(R)
AUDIO IN(L)
P6501 6
P7502 3
P6501 8
P7502 1
AV1 (TV)
AUDIO OUT(R)
AUDIO IN(R)
AUDIO OUT(L)
AUDIO IN(L)
LINE SELECT
MUTE
AUDIO OUT(R)
AUDIO OUT(L)
AV2 (DECODER/EXT)
TW4902
TW4907
TW4903
TW4901
QR4008
QR4007
DECODER SELECT
OUTPUT SELECT
INPUT SELECT
REC LEVEL CONTROL
SELECT SW CONTROL
MUTE CONTROL
VOLUME CONTROL
IIC BUS INTERFACE
SYS IIC DATA
SYS IIC CLOCK
TO/FROM SYSTEM CONTROL
AUDIO H.SW
FROM SYSTEM CONTROL
RCH REC/PB PROCESS
LCH REC/PB PROCESS
MODULATOR/ DEMODULATOR
D.O.C
B.P.F
TL4502
TW4502
TW4501
MIX AMP
TO TUNER
RFC AUDIO OUT
IC4002
FROM DECODER
TUNER AUDIO(R)
TUNER AUDIO(L)
AMP
IC3001
FROM TV DEMODU
TUNER AUDIO(N)
Q7601
MUTE
SW GAIN
ALC
QR4001
A.HEAD(W)
A.HEAD(R)
TO/FROM AC HEAD
NORMAL SELECT
HI-FI AUDIO HEAD
L
R
P502 9
P502 10
P502 11
IC501
AGC
PREAMP /SW
REC IN
RF OUT
AUDIO H.SW
D.FM REC
P501 3
P3001 14
P501 4
P3001 13
P501 2
P3001 15
P501 5
P3001 12
AUDIO HEAD-K
AUDIO HEAD-L
HEAD AMP C.B.A.


IC0201 (CAPSTAN MOTOR DRIVE)
CAPSTAN MOTOR L0201
TL0201
MOTOR DRIVE
DIFFERENTIAL AMPRIFIER
TORQUE CONTROL
TL AMP
EC AMP
POSITION SIGNAL PROCESS
TORQUE DIRECTION
CONTROL LOGIC
H1
H2
H3
LOADING MOTOR
INPUT
OUTPUT
MODE
PIN 15
PIN 16
PIN 19
PIN 21
H L H L FORWARD
L H L H REWIND
H H I I BRAKE
L L OPEN OPEN STOP
IC6001
(SYSTEM CONTROL/SERVO IC)
TL2503
CURRENT LIMIT
CAPSTAN ERROR TORQUE
CAPSTAN REVERSE/ FORWARD
UNREG 14V
LOADING
UNLOADING
TL2502
REG 5V
IC2501
TW2015
TL2015
CAPSTAN FG IN
R0206 CAPSTAN FG HEAD
CAP FG5V
TW2002
GTL OUT
QR2504
FF/REW
S1501 MODE SW
POSITION SW2
POSITION SW3
POSITION SW1
CYLINDER STATOR UNIT
MAIN COIL 2
MAIN COIL 1
MAIN COIL 3
HALL IC
VM
M2
M1
M3
GND
HE-
HE+
VH+
IC2502 (CYLINDER MOTOR DRIVE)
MOTOR DRIVE
PG/FG
DIFFERENTIAL AMPLIFIER
SCHMIT
TORQUE CONTROL
TL6001
NOR/SERV/ T1/T2
CYL PFG
5V(A)
5V(DA)
CYL ET
TW6002
129Hz
TAKE-UP PHOTO
SUPPLY PHOTO
SAFETY TAB
IC1502 (S-REEL SENSOR)
IC1501 (T-REEL SENSOR)
TL6012
TL6013
T-REEL PULSE
S-REEL PULSE
Q1501 TAKE UP PHOTO SENSOR
D1501 SENSOR LED
Q1502 SUPPLY PHOTO SENSOR
S7505 SAFETY TAB SW
CTL HEAD
CTL HEAD(-)
CTL HEAD(+)
POWER ON
POWER S7510
N.SW 5V
16MHz IN
16MHz OUT
32KHz IN
32KHz OUT
X6001
X6002
FIP
BACK UP 5V
RESET
IR
P.FAIL
FIP/OSD CS
T.TLK
T.LSN
T.CLK
IC7505
RESET
IC7504
IR RECEIVER
IC7502
RESET
DP7501
TIMER DISPLAY
FROM POWER
Q1002
Q1001
QK1001
C7514
PK7702
TO/FROM OSD PACK
IC7501
SEG0
SEG17
P1
P7
VEE
X OUT
X IN
RESET
CS
SERIAL DATA IN
SERIAL DATA OUT
SERIAL CLOCK
A.DUB S7517
EJECT S7516
D.TV REC S7509
PLAY S7511
T.REC S7507
CH UP S7506
STOP S7512
REC S7503
CH DOWN S7504
REW S7513
FF S7514
SEARCH S7515
(HD647)
AN4
AN3
AN2


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
TO/FROM OSD PACK
PK7702 13
PK7702 15
OSD VIDEO IN
OSD VIDEO OUT
TO TUNER
RFC VIDEO OUT
FROM TV DEMODULATOR
TUNER VIDEO
Q4911
AMP
TO SYSTEM CONTROL
HSS
AV1 (TV)
PB +12V
BLUE
GREEN
RED
BLANKING
VIDEO OUT
VIDEO IN
QR4902
QR4901
UNREG 14V
Q4906, Q4907
AMP
IC4902
(HD642)
FROM OSD PACK
PK7701 13
TV
AV2 (DECODER/EXT)
Q4905
Q4908, Q4909
IC4904
FROM SYSTEM CONTROL
ART V/H/N
TW3003
TW3002
PK7701 14
PK7701 15
PK7701 3
PK7701 4
PK7701 2
DEA
DEB
CPB
AV1 PB
RGB OFF
QR4903
IC4901
(HD647)
VIDEO IN
FRONT VIDEO
P6501 4
P7502 5
TO/FROM SYSTEM CONTROL
SYS IIC CLOCK
SYS IIC DATA
FROM OSD PACK
PK7701 7
VA
TRUTH TABLE (IC4901,IC4902)
TRUTH TABLE (IC4904)